

Purchase Order Receipt Listing

Thursday, July 26, 2012 8:56:04 AM

All amounts are calculated in domestic currency.

All Vendors PO ID PO17463 Receipt Dates from 7/26/2012 to 7/26/2012 All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID/Vendor Name		VC-COP001 Thyssenkrupp Materials CA Ltd									
PO17463	3		M303B1.000X1.000 f		7/25/2012	7/26/2012	12.7000	\$13.49	0.0000	0	\$171.36
CAD	No		303 BAR 1" X 1" f		12.0000	DESJ02		\$171.36	0.0000	0	
			122521								
	6		M304S11GA sf		7/23/2012	7/26/2012	280.0000	\$8.85	0.0000	0	\$2,478.17
	No		304/316 0.125 Sheet sf		280.0000	DESJ02		\$2,478.17	0.0000	0	
			122521								
	7		M6061T6B0.500X01. f		7/23/2012	7/26/2012	24.0000	\$1.55	0.0000	0	\$37.09
	No		6061-T6 Bar .500 x f		24.0000	DESJ02		\$37.09	0.0000	0	
			1.25								
			122521								
	8		M6061T6B0.500X06. f		7/23/2012	7/26/2012	24.0000	\$7.03	0.0000	0	\$168.78
	No		000		24.0000	DESJ02		\$168.78	0.0000	0	
			6061-T6 Bar .500 x f								
			6.00								
			122521								
	9		M6061T6B0.750X01. f		7/23/2012	7/26/2012	24.0000	\$2.62	0.0000	0	\$62.80
	No		500		24.0000	DESJ02		\$62.80	0.0000	0	
			6061-T6 Bar .750 X f								
			1.50								
			122521								
	10		M6061T6B1.000X04. f		7/23/2012	7/26/2012	24.0000	\$9.24	0.0000	0	\$221.77
	No		000		24.0000	DESJ02		\$221.77	0.0000	0	
			6061-T6 Bar 1.00 x f								
			4.00								
			122521								
	11		M6061T6B1.250X01. f		7/23/2012	7/26/2012	12.0000	\$3.60	0.0000	0	\$43.18
	No		250		12.0000	DESJ02		\$43.18	0.0000	0	
			6061-T6 Bar 1.25 x f								
			1.25								
			122521								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Sid	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Lmp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID/Vendor Name			VC-COP001 Thyssenkrupp Materials CA Ltd								
PO17463	12		M6061T6B1.500X02. f 000		7/23/2012	7/26/2012	12.0000	\$6.87	0.0000	0	\$82.43
CAD	No		6061-T6 Bar 1.50 x f 2.00 122521		12.0000	DESJ02		\$82.43	0.0000	0	
	13		M6061T6B2.000X02. f 250		7/23/2012	7/26/2012	12.0000	\$11.61	0.0000	0	\$139.34
	No		6061-T6 Bar 2.00 x f 2.25 122521		12.0000	DESJ02		\$139.34	0.0000	0	
	14		M6061T6R1.000 f		7/23/2012	7/26/2012	24.0000	\$1.80	0.0000	0	\$43.18
	No		ROUND BAR 1.00" f 122521		24.0000	DESJ02		\$43.18	0.0000	0	
	15		M6061T6R3.500 f		7/23/2012	7/26/2012	12.0000	\$23.06	0.0000	0	\$276.73
	No		6061 RD bar 3.50 f 122521		12.0000	DESJ02		\$276.73	0.0000	0	
	17		M6061T6S.080 sf		7/23/2012	7/26/2012	96.0000	\$3.05	0.0000	0	\$292.43
	No		6061-T6 .080 Sheet sf 122521		96.0000	DESJ02		\$292.43	0.0000	0	
	18		M6061T6S.125 sf		7/23/2012	7/26/2012	64.0000	\$4.75	0.0000	0	\$304.20
	No		6061-T6 .125 Sheet sf 122521		64.0000	DESJ02		\$304.20	0.0000	0	
Total Received Quantity:											620.7000
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$4,321.47
Total Balance Due Quantity:											0.0000

Receiving Report

Date: 12/7/26
 Supplier: THYSSSEN

Batch No: M12251
 Dart P/O: 17463

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☒

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☐ No ☒
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection: 14 12/07/27 N/A ☐
 Work Order: 9-83 N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
M304B0.5W X 2000		24	0	0	24	
M24B.0625 X 340		12	0	0	12	
M6061T65032		96	0	0	96	
M7075+332000 X 3		256	0	0	6	

Initials of receiver (if shipment OK) Level 12 le

Production/Admin: 12/1/26
 Date: 12/1/26
 Received/Costing: 12/1/26
 Initial: 12/1/26

Location

B I L L O F L A D I N G

No: PEC 777693

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW
Probill
Via VIM TRANSFER
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC-472083- 1 Your PO # 17463
STAINLESS STEEL SQ BAR 303 STAINLESS
1.00" X 151.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
245298	88401	12 ' 7.0000 "	1	✓	43

2) Our Order PEC-472083- 2 Your PO # 17463
STAINLESS STEEL SHEET 304-2B
.1200 Nom X 48.0000" X 120.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
SF29688	88728	280.00 SFT	7	✓	1347

3) Our Order PEC-472083- 3 Your PO # 17463
ALUMINUM FLAT BAR 6061-T6511
.50" x 1.250" X 144.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
Z00248009	88402	24 FT	2	✓	17

4) Our Order PEC-472083- 4 Your PO # 17463
ALUMINUM FLAT BAR 6061-T6511
.50" X 6.00" X 144.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
201210006	88403	24 FT	2	✓	84

5) Our Order PEC-472083- 5 Your PO # 17463
ALUMINUM FLAT BAR 6061-T6511
.750" X 1.50" X 144.0000"

Heat Number	Tag No	Quantity	PCS	MTR	Wt LBS
HK079 712	88404	24 FT	2	✓	32

Page: 1Continued

2 10/2/26

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

25 JUL 2012

B I L L O F L A D I N G

No: PEC 777693

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW
Probill
Via VIM TRANSFER
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G

6) Our Order PEC-472083- 6 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.00" x 4.00" X 144.0000"

Heat Number
201210303

Tag No
88405

Quantity
24 FT

PCS
2

MTR

Wt LBS
114

7) Our Order PEC-472083- 7 Your PO # 17463

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

Heat Number
Z00240017

Tag No
88406

Quantity
12 FT

PCS
1

MTR

Wt LBS
23

8) Our Order PEC-472083- 8 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.50" x 2.00" X 144.0000"

Heat Number
201209117

Tag No
88407

Quantity
12 FT

PCS
1

MTR

Wt LBS
43

9) Our Order PEC-472083- 9 Your PO # 17463

Part # OFFERING*****

Rel #

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

Heat Number
C7331164

Tag No
88408

Quantity
12 FT

PCS
1

MTR

Wt LBS
71

10) Our Order PEC-472083- 10 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

Heat Number
Z00216020

Tag No
88409

Quantity
24 FT

PCS
2

MTR

Wt LBS
23

11) Our Order PEC-472083- 11 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

12/2/12
MTR

Page: 2Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

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RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

25 JUL. 2012

B I L L O F L A D I N G

No: PEC 777693

Ship From:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW
 Probill
 Via VIM TRANSFER
 FOB CONCORD
 Frt PREPAID
 Route 0- 0 Manifest
 Vhcle Trailer
 Slp STAN IVERS (905-532-1350)
 Sold To: (20115)
 DART AEROSPACE

Ship To: (1)
 DART AEROSPACE

B I L L O F L A D I N G

Heat Number	Tag No	Quantity	PCS	Wt LBS
21112151	88410	12 FT	1	140

12) Our Order PEC-472083- 12 Your PO # 17463

ALUMINUM SHEET 6061 T6

.0810 Nom X 48.0000" X 144.0000"

Heat Number	Tag No
25872/01/00	88035

Quantity	PCS
96.00 SFT	2

MTR

Wt LBS
105

13) Our Order PEC-472083- 13 Your PO # 17463

ALUMINUM SHEET 6061 T6

.1250 Nom X 48.0000" X 96.0000"

Heat Number	Tag No
30286/01/00	88036

Quantity	PCS
64.00 SFT	-2

MTR

Wt LBS
109

14) Our Order PEC-472083- 14 Your PO # 17463

Part # PLATE ASTM B 209 QQ-A-250/12 Rel #

ALUMINUM PLATE 7075T7351

2.50" THICK X 3.2500" X 72.0000"

*** BACK ORDER ***

TOTAL:	Tags	PCS	LBS
	13	26	2151

Heat Number
 201209117
 201210006
 201210303
 21112151
 245298
 25872/01/00
 30286/01/00
 HK079 712
 SF29688
 Z00216020

*** Chemical Analysis ***

Page: 3Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
 RAPPORTÉES IMMÉDIATEMENT.

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RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

25 JUL. 2012

B I L L O F L A D I N G
Ship From: *
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

No: PEC 777693
Ship Date 23Jul12 at 10:57 From PFW
Probill
Via VIM TRANSFER
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

=====

B I L L O F L A D I N G

Z00240017
Z00248009

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

TOTAL 1 BDL, 2 SKIDS GW. 2477 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

Page: 4 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER

25 JUL 2012

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SQ BAR 303 STAINLESS

1.00" X 151.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-001

23Jul12

Signed by: _____ Pg 1/1

**Acciaierie
Valbruna S.p.A.**



36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4
Clienti / Beteiligte/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
Hersteller/Usine produce

Avviso di Spedizione: D-VI08000486
Litho/Druck/Packing list/B.L.

Ordine nr: 706001820 STOCK
Bestell/Your order/Commande

**CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2005) , 3.1**

Certificato nr: MEST576706/2008/
Prüfung/Tess/Essai

Conferma ordine nr: EI07004722
Works-Our Order/Ref. nr.

Marchio di Fabbrica:
Zeichen des Herstellers
Tracé marq
Siglo de la usine produccie



Punzone del Collaudatore:
Stempel des Werkstättverständigen
Inspection stamp/Prignon de l'essayeur



Oggetto Prove: - Annealed Cold Drawn
Prüfungszustand/Item inspected/Friscoppo

Tipo di Elaborazione: E+AOD
Erzähme zuzugabe/Melting process/Mode d'elaboration

Specifiche:

Anforderungen / Requirements / Exigences

VS1 0 303 A,CF
ASME SA320 2004 B8F e
ASTM A370 2007A
QQ-S-764 B/2 303 A
(0) SEC. II PT. A 2004 EDITION ADD.2006
(1) Chemical analysis only.

AMS 5640 U S30300 A
ASTM A314 97 S30300
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A
ASTM A320 2007A B8F (1)
MIL-S-862 B/1 303

0Chemical analysis only.

Qualità: T-303

Werkstoff/Grade/Qualité

Marca: VPAU188Z VALPLUS

Marke/Bezeichnung/Brand/Numéro

Punzonatura: T-303

Kenzeichnung/Marking/Markage

Pos. nr. Item nr. Nr. de pose	Oggetto Gegenstand Produit descriptif Description d. produit	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Tolérance Allowance Tolerance	Lunghezza - Ft Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0060	Square	1.0000 x 1.0000	484-06B	13 / 13	245298		1.790	706701180

Sono state soddisfatte tutte le condizioni richieste
Die gezeigten Anforderungen sind in Anlage erfüllt
The material has been furnished in accordance with the requirements
Le matériel a été fourni conforme aux exigences

Controllo antimescolanza: OK
Vermischungsprüfung: spectralanalytisch durchgeführt
Antimixing testing performed: OK
Contrôle antimélange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze
Befehigung und Ausmessung ohne Beanstandung
Visual inspection and dimensional check satisfactory
Contrôle visuel et dimensions: satisfaisant

TEST	Provetta/Proben Specimen/Eprouve Long. diam. Ø/mm Weld Diam. Thickness Leg. diam. mm	° F	Posit. Saggio Position Lage	Snervamento Deformation Yield Stress Rp 0,2% k.s.i.	Snervamento Deformation Yield Stress Rp 0,2% k.s.i.	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Elongation Elongation Allongement E 4d %	Strizione Elongation Reduction of area Striction RA %	Resistenza Kerbschlagenergie Impact Value Resistance	Durezza Härte Hardness Dureté HB
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max								140 255
A	12,5	68	L	80		102	37	50		242

Grain size for ASTM E112

6

1) L=longitudinale/Longo, Q=transversale/Quers., T=angolare/anguliert

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata/Heat Schmelze/Coulée	min - max 0,150	1,00	1,50 2,00	7,00 19,00	0,30	1,00	8,00 10,00	0,100	0,25 0,35	0,40	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %			
245298	0,053	0,47	1,79	17,24	0,38	0,71	8,13	0,10	0,029	0,28	0,01			

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 1h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, 4.3 by TÜV SÜD and LLOYD'S

DAS
14
2-89
12/07/27

Vicenza, 14/01/08 VCO008 (Mod. MCER)	Il collaudatore di stabilimento / der Werkstättverständigen / Works inspector / L'agent d'usine M. Rizzotto	Pagina - 1 di 1
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THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.50" x 1.250" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-003

23Jul12

Signed by: _____ Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-236648-4		CUSTOMER PART NUMBER: ALREC00139		PRODUCT DESCRIPTION: 0.500 X 1.250 SQ COR RECT BAR	
KAISER ORDER NUMBER: 612835	LINE ITEM: 004	SHIP DATE: 02/03/2012	KAISER LOT NUMBER: Z00248009	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 494.000 LB	QUANTITY: 56.000 PCS	B/L NUMBER: 602545	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00248009	0C01	1	45.9	43.1	15.5	RE 91	N/A	N/A
Z00248009	0C01	2	47.0	44.1	16.2	RE 92	N/A	N/A
Z00248009	0C01	3	46.5	43.6	17.1	RE 94	N/A	N/A
Z00248009	0C01	4	47.1	44.5	17.1	RE 91	N/A	N/A
Z00248009	0C01	5	46.5	43.8	16.5	RE 88	N/A	N/A
Z00248009	0C01	6	46.0	43.0	17.9	RE 94	N/A	N/A
Z00248009	0C01	7	45.6	42.3	15.9	RE 93	N/A	N/A
Z00248009	0C01	8	46.2	43.3	16.1	RE 91	N/A	N/A
Z00248009	0C01	9	46.5	43.7	17.9	RE 93	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101C84	.73	.37	.29	.08	.94	.10	.08	.03	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

DAS
14 12/07/27
2-89

Plant Serial: 00028007

Kaiser Order Number: 612835

Line Item: 004

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6S11
.50" x 1.250" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-003

23Jul12

Signed by: _____ Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgment form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

Alex Yeh

Plant Serial: 00028007

Kaiser Order Number: 612835

Line Item: 004

Page 2 of 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
1.00" x 4.00" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PEC-777693-006

23Jul12

Pg 1/1



SERVICE CENTER METALS

5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152409	3

BILL TO

ThyssenKrupp Materials NA

SHIP TO

ThyssenKrupp Materials NA PEC

Quantity Certified 1,482 lbs 26pcs

MANIFEST NUMBER

162248

CUSTOMER PO

PEC-239753

CUSTOMER PART NUMBER

RB0128

DIE NUMBER

RB0128

ALLOY / TEMPER

6061-T6511

DESCRIPTION

SCRB 1.000x4.000

DATE OF SHIPMENT

6/19/2012

SALESPERSON

David Schroeder

CERTIFICATION

ASTM-B221-12 StencilContinuous

SPECIFICATION

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201210303	06/12/12	50.2	46.9	14.9

DAS
14
9-83
12/07/27

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	AL	Others Each	Total	Melt Source:
0512135	6061	0.73	0.38	0.31	0.09	0.84	0.09	0.07	0.02	97.47	0.05	0.15	United States of America

Print Date: 6/19/2012

Calvin J. Wiggins Director of Quality & Technical Services

Rev. 8/23/11 - LMS

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
1.50" x 2.00" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PEC-777693-008

23Jul12
Pg 1/1



SERVICE CENTER METALS
5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152110	12

BILL TO

ThyssenKrupp Materials NA

SHIP TO

ThyssenKrupp Materials NA PEC

Quantity Certified 1,369 lbs 32 pcs

MANIFEST NUMBER

161536

CUSTOMER PO

PEC-239616

CUSTOMER PART NUMBER

RB0138

DIE NUMBER

RB0138

ALLOY / TEMPER

6061-T6511

DESCRIPTION

SCRB 1.500x2.000

DATE OF SHIPMENT

6/8/2012

SALESPERSON

David Schroeder

CERTIFICATION

ASTM-B221-12 StencilContinuous

SPECIFICATION

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
91	201209117	05/25/12	51.5	49.2	14.9
92	201209117	05/25/12	49.9	46.8	15.1
93	201209117	05/25/12	49.2	46.4	15.6
94	201209117	05/25/12	49.1	46.0	16.8
95	201209117	05/25/12	49.3	46.7	15.2
96	201209117	05/25/12	49.3	45.9	15.3

12/12/07
14
8-89

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
													United States of America
031424	6061	0.77	0.38	0.35	0.11	0.91	0.09	0.06	0.02	97.31	0.05	0.15	
032224	6061	0.72	0.38	0.30	0.09	0.86	0.09	0.06	0.02	97.48	0.05	0.15	
032725	6061	0.74	0.36	0.32	0.10	0.84	0.09	0.08	0.02	97.45	0.05	0.15	

Calvin J. Wiggins

Print Date: 6/8/2012

Calvin J. Wiggins, Director of Quality & Technical Services

Rev. 9/23/11 - UMS

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-010

23Jul12

Signed by: _____ Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:	
PEC-239097-5		015246-2		KAISERSELECT PRECISION ROD 1.000+/-0.004	
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:		KAISER LOT NUMBER:	ALLOY:
620138	005	05/11/2012		Z00216020	6061
WEIGHT SHIPPED:		QUANTITY:		TEMPER:	
2922.000 LB		264.000 PCS		T6511B	
SHIP TO:		B/L NUMBER:		DIAM/DAF/THKNS:	
2922.000 LB		603400		WIDTH:	
SHIP TO:		SOLD TO:		LENGTH:	
THYSSENKRUPP MATERIALS NA		THYSSENKRUPP MATERIALS NA		12.000 FT.	
2821 LANGSTAFF ROAD		2821 LANGSTAFF ROAD			
CONCORD, ON L4K 5C6 CANADA		CONCORD, ON L4K 5C6 CANADA			

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z0021602C	0C01	1	51.2	49.0	16.9	RE 94	N/A	N/A
Z0021602C	0C01	2	50.9	48.6	16.3	RE 93	N/A	N/A
Z0021602C	0C01	3	50.7	48.6	16.9	RE 93	N/A	N/A
Z0021602C	0C01	4	50.1	47.4	15.8	RE 93	N/A	N/A
Z0021602C	0C01	5	51.1	48.9	16.6	RE 94	N/A	N/A
Z0021602C	0C01	6	51.6	49.3	16.4	RE 94	N/A	N/A
Z0021602C	0C01	7	51.2	48.9	17.3	RE 95	N/A	N/A
Z0021602C	0C02	1	49.7	47.2	17.4	RE 94	N/A	N/A
Z0021602C	0C02	2	49.6	47.0	16.6	RE 95	N/A	N/A
Z0021602C	0C02	3	50.1	47.9	15.7	RE 94	N/A	N/A
Z0021602C	0C02	4	50.3	47.9	16.9	RE 94	N/A	N/A
Z0021602C	0C02	5	49.5	47.9	16.9	RE 93	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101538	.72	.32	.28	.09	.95	.09	.05	.03	.00	.00	.00	.01	.03

Applicable Requirements:

PER ASTM-B221-08, STENCILED ASME-SB221 1998 SECT II PER AMS-QQ-A-200/8 UNS# A96061
MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM MECHANICAL
PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

DAS
14
2-89 12/07/27

Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-010

23Jul12

Signed by: _____

Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

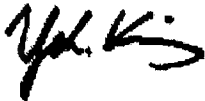
CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager



Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

Page 2 of 2



Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 04 11

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

Auftraggeber / customer: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	Bestell Nr. / order no.:	PEC-237401
	Datum / date:	2012 03 05
Warenempfänger / consignee: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	Auftragsbest. Nr. / order confirm. no.:	638423
	Datum / date:	2012 03 06
Endkunde, Bestell-Nr. / Your cust., ord. no.:	Lieferschein Nr. / delivery note:	85283529
	Datum / date:	2012 04 30
	Akkreditiv Nr. / letter of credit no.:	

Produkt/product	Bedingungen/terms
Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: [inch]: 0,125x48,00x96,00 Kundenartikel-Nr / customer article no.:	Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N, 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007
	Sondervorschrift / special terms:

AB-Pos. ord.-item.	BNr/Los/Teillos Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
04	30286/01/00	01/0049556/2	6061.1	6384230007	4003,527 lbs	73
04	30286/01/00	01/0049556/2	6061.1	6384230008	4001,323 lbs	73

Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)

Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti
01/0049556/2	6061.1									
	actual	0,08	0,43	0,26	0,12	0,93	0,18	0,01	0,05	0,06

Zugversuch / Tensile test

BNr/Los Lot/No.	Zustand temper	Richtung direction	Rm [ksi]	Rp0.2 [ksi]	A2" [%]
30286/01	T6	LT	47,4	41,0	15
30286/01	T6	LT	47,1	40,6	14
30286/01	T6	LT	47,1	40,6	14
30286/01	T6	LT	47,1	40,8	14
30286/01	T6	LT	47,0	40,3	16
30286/01	T6	LT	47,0	40,3	15
30286/01	T6	LT	47,1	40,5	15
30286/01	T6	LT	47,4	40,6	15
30286/01	T6	LT	47,9	41,0	15

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6
.1250 Nom X 48.0000" X 96.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-013

23Jul12

Signed by: _____ Pg 2/2



Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 13949, EN/AS 9100, ISO 14001, NADCAP

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 04 11

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.
We hereby certify that the material described above has been tested and complies with the terms of the order contract.

Werkssachverständiger / factory specialist	E-Mail / e-mail
Josef Klampfer	j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – www.amag.at
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – www.amag.at

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SHEET 304-2B
 .1200 Nom X 48.0000" X 120.0000"
 PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
 furnished by the producer of the metal, or data
 resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-002

23Jul12

Pg 1/1

Signed by: _____

DAS
 14
 2-89
 12/6/27

产品质量证明书 MILL TEST CERTIFICATE

DMSSC 江苏大明金属制品有限公司
 JIANGSU DAMING METAL PRODUCTS CO., LTD.
 地址: 无锡市钱桥乡钱桥村
 ADDRESS: NO. 1518, TONGJIANG ROAD WUXI ROAD
 JIANGSU PROVINCE, CHINA
 TEL: 5108288857

订单号: 828888
 Order No.
 客户: GLOBAL STAINLESS STEEL INC.
 Order
 收货人: _____
 CONSIGNEE

品名: COLD ROLLED STAINLESS
 Commodity STEEL SHEET, SLIT EDGE

编号: M120302001
 Invoice No.
 发行日期: 2012-4-15
 Date

序号 No.	Product No.	牌号 Type	表面加工 Surface Finish	产品尺寸 Product Size			重量 NET Weight KG	标准 Specification	拉伸试验 Tensile Test			硬度 Hardness HV0.05/HRB	钢号 STEEL NO.	炉号 HEAT NO.	化学成分 Chemical Composition (%)							
				厚度 Thickness MM	宽度 Width MM	长度 Length MM			屈服强度 ReL(2) Mpa	抗拉强度 Rm Mpa	延伸率 A %				C	Si	Mn	P	S	Ni	Cr	N
1	P001693080	304	2B	0.5	1219	2438	910.04	ASTM A240	275	731	65	167	QWA0130C	SF28811	0.0510	0.5090	1.9820	0.0321	0.0057	8.02	18.26	1
2	P001693081	304	2B	0.5	1219	3048	906.06	ASTM A240	275	731	65	167	QWA0130C	SF28811	0.0510	0.5060	1.0520	0.0321	0.0067	8.02	18.26	1
3	P001715073	304	2B	0.5	1219	3048	905.00	ASTM A240	270	731	60	167	QWB3401B	SF29408	0.0468	0.5120	1.3540	0.0208	0.0064	8.02	18.32	1
4	P001688219	304	2B	1.6	1219	2438	1813.74	ASTM A240	273	692	82	168	QWB2078D	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1
5	P001683220	304	2B	1.6	1219	3048	1831.40	ASTM A240	273	692	82	168	QWB2078D	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1
6	P001683221	304	2B	1.6	1219	3048	1831.40	ASTM A240	273	692	82	168	QWB2078D	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1
7	P001729553	304	2B	2.0	1219	3048	890.66	ASTM A240	293	706	58	173	QWZ0993A	SF28445	0.0428	0.1720	1.0360	0.0400	0.0051	8.05	18.17	1
8	P001854263	304	2B	3.0	1219	2438	1400.60	ASTM A240	201	663	51	175	QUB0403A	SF28888	0.0504	0.4510	1.1420	0.0343	0.0034	8.05	18.14	1
9	P001854295	304	2B	3.0	1219	3048	1487.64	ASTM A240	201	663	51	175	QUB0403A	SF28888	0.0504	0.4610	1.1420	0.0343	0.0034	8.05	18.14	1
10	P001705088	304	2B	2.0	1219	2438	1400.60	ASTM A240	287	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1
11	P001705121	304	2B	2.5	1219	3048	1363.94	ASTM A240	287	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1
12	P001699782	304	NO. 4	1.5	1219	2438	1890.45	ASTM A240	267	664	59	164	QWCD161B	SF30027	0.0476	0.5270	1.0650	0.0306	0.0049	8.04	18.22	1
13	P001699789	304	NO. 4	1.5	1219	3048	1975.55	ASTM A240	267	664	59	164	QWCD161B	SF30027	0.0476	0.5270	1.0650	0.0306	0.0049	8.04	18.22	1
14	P001696756	304	NO. 4	2.0	1219	2438	1983.80	ASTM A240	315	647	53	83	KAT1234070A10	CS10895	0.0400	0.4500	1.0900	0.0300	0.0010	6.1	18.21	0.046
15	P001703036	304	NO. 4	2.5	1219	2438	1670.30	ASTM A240	267	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1
16	P001703037	304	NO. 4	2.5	1219	2438	1670.30	ASTM A240	267	714	55	174	QUC0023A	SF30003	0.0378	0.4480	1.0270	0.0186	0.0022	8.05	18.17	1

注: 表面加工: 2B
 Size and Surface Treatment

兹证明所列产品均符合订单和标准的制造要求

WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE IN ACCORDANCE
 WITH THE ORDER AND SPECIFICATION
 此证明仅对订单有效

江苏大明金属制品有限公司
 JIANGSU DAMING METAL PRODUCTS CO., LTD.
 王迪强

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.50" X 6.00" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PEC-777693-004

23Jul12

Pg 1/1



SERVICE CENTER METALS
5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152110	6

BILL TO

ThyssenKrupp Materials NA

SHIP TO

ThyssenKrupp Materials NA PEC

Quantity Certified 1,143 lbs 27 pcs

MANIFEST NUMBER

161978

CUSTOMER PO

PEC-239616

CUSTOMER PART NUMBER

PL0102

DIE NUMBER

PL0102

ALLOY / TEMPER

6061-T6511

DESCRIPTION

PL .500x6.000

DATE OF SHIPMENT

6/14/2012

SALESPERSON

David Schroeder

CERTIFICATION

ASTM-B221-12 StencilContinuous

SPECIFICATION

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201210006	06/09/12	49.1	47.0	14.5
2	201210006	06/09/12	50.8	48.5	15.0

58-6
51
SC
12/07/27

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	AL	Others Each	Total	Melt Source:
060421	6061	0.74	0.37	0.33	0.10	0.90	0.09	0.08	0.02	97.37	0.05	0.15	United States of America

Calvin J. Wiggins

Print Date: 6/14/2012

Calvin J. Wiggins, Director of Quality & Technical Services

Rev 9/23/11 - JMS

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-007

23Jul12

Signed by: _____

Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:	
PEC-240344-2		ALSQ00100		1.250 SC SQ BAR	
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:
623482	002	07/06/2012	Z00240017	6061	T6511
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:
1058.000 LB	48.000 PCS	603828			12.000 FT
SHIP TO:			SOLD TO:		
THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00240017	0001	1	52.8	50.5	16.6	RE 93	N/A	N/A
Z00240017	0001	2	51.6	49.0	17.8	RE 93	N/A	N/A
Z00240017	0001	3	51.9	49.4	17.5	RE 94	N/A	N/A
Z00240017	0001	4	52.9	50.7	16.2	RE 93	N/A	N/A
Z00240017	0001	5	52.5	50.1	17.9	RE 94	N/A	N/A
Z00240017	0001	6	51.4	49.0	17.7	RE 94	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101758	.67	.26	.24	.09	.92	.09	.02	.03	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-12 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 (2007) UNS#A96061
(T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

UAS
14
289 12/07/27

Plant Serial: C0050003

Kaiser Order Number: 623482

Line Item: 002

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-007

23Jul12

Signed by: _____

Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Calvin Latting, Quality & Technology Manager

Calvin Latting

Plant Serial: 00050003

Kaiser Order Number: 623482

Line Item: 002

Page 2 of 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511
3.50" DIA X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 1/2

Signed by: _____

sapa:

Sapa Industrial Extrusions
53 POTTSVILLE STREET

CRESSONA, PA

17929-0187

Sapa Extrusions Inc., a Subsidiary of Sapa AB

Invoice To Customer

THYSSENKRUPP MATERIALS NA INC
2821 LANGSTAFF ROAD
ATTN: ACCOUNT PAYABLE

CONCORD, ON - L4K-5C6

Ship To Customer

THYSSENKRUPP MATERIALS NA INC
2821 LANGSTAFF ROAD

CONCORD, ON - L4K5C6

Certified Inspection Report

Sales Order Number	Line No.	Customer P/O	Cert Number	Page
1100483665	1	PEC-240110-001	SAPA591092	1 of 2
			Cert Creation Date	Cert Print Date
			25-JUN-12	25-JUN-12

Quantity Shipped	Date Shipped	Item Description	Specification
1900 LB	25-JUN-12	ACC-U-LINE Extruded ACC-U-ROD 3.500 DIA +/- .012	ASTMB221 REV 12 AMS-QQ-A-200/8 REV ASMESB221 REV 09 UNS#A96061 REV SAEJ454 REV Meets 6061-T6511H, 6061-T6511 REV
B/L	Item No.	SECT 500328 144.000 IN LN FIN M-MILL W/F 11.314 F 1 CS 3.5 6061/T6511H Marking CONTINUOUS;	
Delivery Id	Item No. Rev	4330967	
Customer Part No.			
3.5ER+			

Applicable Specifications, Revisions and Exceptions

COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on
this certified inspection report. Remainder is Aluminum.

Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

Signature And Title

William T. Martin, III

William Martin III

Tech/Quality Manager

25-JUN-12

Quantities per Lot / Packages

Package Number	Lot Number	Quantity	UOM	Weight	
				Gross	Net
G12-PKG1711554	21112151	7	PCS	956	950
G12-PKG1711554	21112151	--	--	--	--
G12-PKG1711554	21112151	--	--	--	--
G12-PKG1711558	21112151	7	PCS	956	950

Composition Limits

12/07/22
14
9-89

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 2/2

sapa:

Sapa Industrial Extrusions
53 POTTSVILLE STREET

CRESSONA, PA

17929-0187

Certified Inspection Report

Sales Order Number

1100483665

Line No.

1

Customer P/O

PEC-240110-001

Cert Number

SAPA591092

Page

Page 2 of 2

Cert Creation Date

25-JUN-12

Cert Print Date

25-JUN-12

Alloy	Si		Fe		Cu		Mn		Mg		Cr		Zn	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6061	0.40	0.80	---	0.70	0.15	0.40	---	0.15	0.80	1.20	0.04	0.35	---	0.25
Alloy	Ti		Bi		Pb		Others Each		Others Total					
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max				
6061	---	0.15	---	0.05	---	0.05	---	0.05	---	0.15				

Composition Results

Heat / Cast	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Bi	Pb	Others Each	Others Total
4028239	0.69	0.30	0.31	0.10	0.87	0.13	0.04	0.02	---	---	---	---

Mechanical Property - Test Limits

			UTS - L		TYS - L		EL 40-Long	
			KSI		KSI		KSI	
			MIN Value		MAX Value		MIN Value	
Test Temper	Lot Number	# of Tests	MIN Value	MAX Value	MIN Value	MAX Value	MIN Value	MAX Value
T6511H	21112151	2	51.4	53.3	48.3	50.3	12.5	13.0

Cert Notes

Products manufactured with a T6511 temper also meet T6 temper requirements.

Yield strength has been determined by the 0.2% offset method

All Mill Finish Alloys produced at Sapa Extrusions comply with 0.4% Maximum Lead per RoHS, with the exception of 6262 alloy

In accordance with EN 10204 Inspection Certificate Type 3.1

Melted in the USA or Other Qualified Countries as Defined by DFARS 225.872.1

Made in USA

12/07/27
DAS
14
8-83

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.750" X 1.50" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: _____

Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-239300-1		CUSTOMER PART NUMBER: ALREC00806		PRODUCT DESCRIPTION: .750 X 1.500 SC RECT BAR	
KAISER ORDER NUMBER: 621011	LINE ITEM: 001	SHIP DATE: 05/25/2012	KAISER LOT NUMBER: HK079 712	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 508.000 LB	QUANTITY: 32.000 PCS	B/L NUMBER: 603528	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
HK079 712	0001	0001	43.0	41.6	19.4	RE 97	N/A	N/A
HK079 712	0001	0002	43.1	38.1	20.5	RE 97	N/A	N/A
HK079 712	0001	0003	43.0	41.6	20.8	RE 97	N/A	N/A
HK079 712	0001	0004	46.7	39.3	20.3	RE 97	N/A	N/A
HK079 712	0001	0005	47.4	43.3	18.0	RE 97	N/A	N/A
HK079 712	0001	0006	47.8	40.0	18.0	RE 97	N/A	N/A
HK079 712	0001	0007	43.0	42.9	18.6	RE 97	N/A	N/A
HK079 712	0001	0008	43.0	41.9	18.3	RE 97	N/A	N/A
HK079 712	0001	0009	46.9	41.3	19.4	RE 97	N/A	N/A
HK079 712	0001	0010	47.9	40.1	19.8	RE 97	N/A	N/A
HK079 712	0001	0011	46.9	38.6	15.9	RE 97	N/A	N/A
HK079 712	0001	0012	48.1	44.4	19.7	RE 96	N/A	N/A
HK079 712	0001	0013	48.0	42.2	21.7	RE 96	N/A	N/A
HK079 712	0001	0014	47.0	42.1	18.7	RE 96	N/A	N/A
HK079 712	0001	0015	47.5	39.4	17.6	RE 96	N/A	N/A
HK079 712	0001	0016	48.4	40.4	15.1	RE 96	N/A	N/A
HK079 712	0001	0017	48.0	41.9	19.5	RE 95	N/A	N/A
HK079 712	0001	0018	48.1	43.1	17.6	RE 95	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
A32603	.68	.32	.24	.05	.98	.11	.06	.01	.00	.00	.00	.00	.01
A32602	.69	.32	.23	.05	.95	.10	.04	.02	.00	.00	.00	.00	.00
A32601	.70	.30	.24	.06	.97	.11	.05	.02	.00	.00	.00	.00	.00

Applicable Requirements:

DAS
14
2-89 12/07/22

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.750" X 1.50" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: _____

Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also
conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA (COMMERCE, CA) MELTED IN USA

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been
inspected and tested and found in conformance with applicable specifications forming a part of the
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

Alex Yeh

UAS
14
8-89 *12/07/27*

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

Page 2 of 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

PART NO. OFFERING*****

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PEC-777693-009

23Jul12

Pg 1/1



MILL TEST REPORT

TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210
411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4
<http://www.extrudex.com>

BILL TO

THYSSENKRUPP MATERIALS, NA

SHIP TO

THYSSENKRUPP MATERIALS, NA

SO DESCRIPTION

2"x2.5" FB

Cert Code:

1

0.02

CUSTOMER PO

PEC-239512

CUSTOMER PART NUMBER

DIE NUMBER

S 23922

ALLOY TEMPER

6061 T6511

PART DESCRIPTION

DATE OF SHIPMENT

7/16/2012

SALESMAN

FORBES DODWELL

EXTRUDEX ORDER NO.

146935 - 4

MANIFEST NO.

270266

MADE IN CANADA

CERTIFICATION

MILL TEST ASTM B221

Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness	Conductivity
A.11	6061	Jul/13/12	45.2	42.4	13.30	89.3, 89.0, 89.8	

Chemical Composition

Cast Number	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
A.11 C7331164 6061	0.61	0.18	0.19	0.01	0.86	0.06	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Remainder	0.00

David Natale
Quality Control Manager

12/07/27
JAS 14 9-89

1 - CUSTOMER COPY

MILL TEST REPORT

DART AEROSPACE

PO/Rel 17463

BL PEC-777693-012

23Jul12

ALUMINUM SHEET 6061 T6
 .0810 Nom X 48.0000" X 144.0000"
 PART NO.

We certify that this is a true copy of the report
 furnished by the producer of the metal, or data
 resulting from tests made in approved labs.

Signed by: _____ Pg 1/2



Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 02 15

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, NADCAP

Auftraggeber / customer: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD,ON	Bestell Nr. / order no.: PEC-236262 Datum / date: 2012 01 19
	Auftragsbest. Nr. / order confirm. no.: 636296 Datum / date: 2012 01 20
Warenempfänger / consignee: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD,ON	Lieferschein Nr. / delivery note: 85289222 Datum / date: 2012 02 29
	Akkreditiv Nr. / letter of credit no.:
Endkunde, Bestell-Nr. / Your cust., ord. no.:	

Produkt/product	Bedingungen/terms
Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: [inch]: 0,080x48,00x144,00 Kundenartikel-Nr / customer article no.:	Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N, 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007 Sondervorschrift / special terms:

AB-Pos. ord.-item.	BNr/Los/Tell/Los Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
02	25872/01/00	01/0047294/1	6061.1	6362960002	4029,982 lbs	77

Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)

Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti
01/0047294/1	6061.1									
	actual	0,65	0,48	0,23	0,11	0,91	0,18	0,01	0,04	0,06

Zugversuch / Tensile test

BNr/Los Lot/No.	Zustand temper	Richtung direction	Rm [ksi]	Rp0.2 [ksi]	A2" [%]
25872/01	T6	LT	47,0	39,2	16
25872/01	T6	LT	47,1	39,2	15
25872/01	T6	LT	47,3	39,3	15
25872/01	T6	LT	47,0	39,2	16
25872/01	T6	LT	46,8	39,0	16
25872/01	T6	LT	46,7	38,9	15
25872/01	T6	LT	46,7	38,9	15
25872/01	T6	LT	46,8	39,0	16
25872/01	T6	LT	46,6	38,7	15

DA
 14
 2-89 12/07/27

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – www.amag.at
 AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – www.amag.at

THYSSENKRÜPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6
.0810 Nom X 48.0000" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-012

23Jul12

Signed by: _____ Pg 2/2



Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9100, ISO 14001, NADCAP

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 02 15

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.
We hereby certify that the material described above has been tested and complies with the terms of the order
contract.

Werkssachverständiger / factory specialist	E-Mail / e-mail
Josef Klampfer	j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – www.amag.at
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – www.amag.at



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 1 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

905 669 9444

Requisition Nbr

Vendor Fax

905 738 9033

Tax Resale Nbr

10127-2607

Vendor Account Nbr

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
3	M303B1 000X1 000 050	303 BAR 1" X 1"	7/25/12 Yes	12.00 f 12.7	Yours ppd	\$13.7500	\$165.00
		Special Inst: MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE					
4	M304B0.500X2.500 050	304 BAR .500 x 2.5"	7/25/12 Yes	24.00 f	Yours ppd	\$12.9083	\$309.80
		Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 (NOTE: AISI 303 NOT ACCEPTABLE)					
5	M304B0.625X3.000 050	304 BAR .625 X 3.00	7/25/12 Yes	12.00 f	Yours ppd	\$20.2500	\$243.00

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 2 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS
PLATE
AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

6	M304S11GA 000	304/316 0.125 Sheet	7/23/12 Yes	✓ 280.00 sf	Yours ppd 6/27/12	\$9.0193	\$2,525.40 7
---	------------------	---------------------	----------------	----------------	----------------------	----------	-----------------

Special Inst: MATERIAL: AISI 304/316 SS SHEET
ANNEALED 2B FINISH
AS MIL-S-5059 OR AMS 5513 (304) OR
AMS 5524 (316)
OR ASTM A240 OR ASME SA240

7	M6061T6B0.500X01.250 010	6061-T6 Bar .500 x 1.25	7/23/12 Yes	✓ 24.00 f	Yours ppd 6/27/12	\$1.5750	\$37.80
---	-----------------------------	-------------------------	----------------	--------------	----------------------	----------	---------

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

8	M6061T6B0.500X06.000 004	6061-T6 Bar .500 x 6.00	7/23/12 Yes	✓ 24.00 f	Yours ppd 6/27/12	\$7.1667	\$172.00
---	-----------------------------	-------------------------	----------------	--------------	----------------------	----------	----------

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 3 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

9	M6061T6B0.750X01.500 003	6061-T6 Bar .750 X 1.50	7/23/12 Yes	✓ 24.00 f 12/17/26	Yours ppd	\$2.6667	\$64.00
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Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

10	M6061T6B1.000X04.000 004	6061-T6 Bar 1.00 x 4.00	7/23/12 Yes	✓ 24.00 f 12/17/26	Yours ppd	\$9.4167	\$226.00
----	-----------------------------	-------------------------	----------------	-----------------------	-----------	----------	----------

Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

11	M6061T6B1.250X01.250 003	6061-T6 Bar 1.25 x 1.25	7/23/12 Yes	✓ 12.00 f 12/17/26	Yours ppd	\$3.6667	\$44.00
----	-----------------------------	-------------------------	----------------	-----------------------	-----------	----------	---------

No substitution or deviation without consent.

Certificate of Conformity or Material Certification required YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 4 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

905 669 9444

Requisition Nbr

Vendor Fax

905 738 9033

Tax Resale Nbr

10127-2607

Vendor Account Nbr

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Special Inst:

MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

12	M6061T6B1.500X02.000	6061-T6 Bar 1.50 x 2.00	7/23/12	12.00	Yours ppd	\$7.0000	\$84.00
	010		Yes	f			

Special Inst:

MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

13	M6061T6B2.000X02.250	6061-T6 Bar 2.00 x 2.25	7/23/12	12.00	Yours ppd	\$11.8333	\$142.00
	009		Yes	f			

Special Inst:

MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

14	M6061T6R1.000	ROUND BAR 1.00"	7/23/12	24.00	Yours ppd	\$1.8333	\$44.00
	03		Yes	f			

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required ☒ YES ☐ NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 5 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM/
ROUND BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/
4115/4116 OR QQ-A-200/8 OR AMS-QQ-
A-200/8 OR AMS 4160
OR ASTM B211 OR ASTM B221

15	M6061T6R3.500 006	6061 RD bar 3.50	7/23/12 Yes	12.00 f	Yours ppd 1/12/12	\$23.5000	\$282.00
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Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
ROUND BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/
4115/4116 OR QQ-A-200/8 OR AMS-QQ-
A-200/8 OR AMS 4160
OR ASTM B211 OR ASTM B221

16	M6061T6S.032 021	6061-T6 Sheet 0.032"	7/23/12 Yes	96.00 sf	Yours ppd	\$1.9792	\$190.00
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Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM
SHEET
AS PER QQ-A-250/11 OR AMS-QQ-A-
250/11 OR
AMS 4025 OR AMS 4027 OR ASTM B209

17	M6061T6S.080 021	6061-T6 .080 Sheet	7/23/12 Yes	96.00 sf	Yours ppd 1/14/12	\$3.1042	\$298.00
----	---------------------	--------------------	----------------	-------------	----------------------	----------	----------

No substitution or deviation without
consent.

Certificate of Conformity or Material
Certification required- YES NO

Change Nbr: 2

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 6 of 6

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM
SHEET
AS PER QQ-A-250/11 OR AMS-QQ-A-
250/11 OR
AMS 4025 OR AMS 4027 OR ASTM B209

18	M6061T6S.125	6061-T6 .125 Sheet	7/23/12	64.00	Yours ppd	\$4.8438	\$310.00
			Yes	\$f			

021

10127-2607

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM
SHEET
AS PER QQ-A-250/11 OR AMS-QQ-A-
250/11 OR
AMS 4025 OR AMS 4027 OR ASTM B209

19	M7075T73B2.500X03.25	7075-T73 Bar 2.50 x 3.25	7/23/12	6.00	Yours ppd	\$49.6667	\$298.00
			Yes	f			

008

Special Inst: 7075-T73 (OR 7075-
T7351/T73510/T73511) BAR PER ASM-
QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS
4124) OR AMS-QQ-A-250/12 (AMS 4078)

PO Total: \$5,435.00

CL

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required **YES** NO

Change Nbr: 2

Change Date: 7/17/12

07/17/12

02:23 PM EDT

STELfax

From: THYSSENKRUPP MATERIALS NA
STAN IVERS
Tel: 905 669 9444
Fax: 9057389033

To: DART AEROSPACE
Attn: 96294
Tel: 613-632-9577
Fax: 613-632-1053
Number of Pages: 4

Subject: Sales Acknowledgement

17Jul12 14:22 S A L E S A C K N O W L E D G M E N T No: PEC ST-472083
 Sold By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Sold To: (20115)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Ship To: (1)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Ord 17Jul12 Due19Jul12
 Frt PREPAID Via VIM TRANSFER FOB CONCORD
 Con 96294 PO/Rel 17463
 Slp STAN IVERS (905-532-1350) Tel 613-632-9577 Fax 613-632-1053

S A L E S A C K N O W L E D G M E N T SO No PEC ST-472083
 Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL SQ BAR 303 STAINLESS 1.00" X 151.0000" MATERIAL ENERGY & CAP SURCHG	1 PCS @ 165.0000 EA 25.0000 LOT	43 LBS 165.00 25.00
2 STAINLESS STEEL SHEET 304-2B .1200 Nom X 48.0000" X 120.0000" MATERIAL	7 PCS @ 360.7714 EA	1,403 LBS 2,525.40
3 ALUMINUM FLAT BAR 6061-T6511 .50" x 1.250" X 144.0000" MATERIAL	2 PCS 24 FT @ 1.5750 FT	18 LBS 24 FT 37.80
4 ALUMINUM FLAT BAR 6061-T6511 .50" X 6.00" X 144.0000" MATERIAL	2 PCS 24 FT @ 7.1667 FT	86 LBS 24 FT 172.00
5 ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144.0000" MATERIAL	2 PCS 24 FT @ 2.6667 FT	32 LBS 24 FT 64.00
6 ALUMINUM FLAT BAR 6061-T6511 1.00" x 4.00" X 144.0000" MATERIAL	2 PCS 24 FT @ 9.4167 FT	113 LBS 24 FT 226.00
7 ALUMINUM SQUARE BAR 6061-T6511 1.250" X 144.0000" MATERIAL	1 PCS 12 FT @ 3.6667 FT	22 LBS 12 FT 44.00
8 ALUMINUM FLAT BAR 6061-T6511 1.50" x 2.00" X 144.0000" MATERIAL	1 PCS 12 FT @ 7.0000 FT	42 LBS 12 FT 84.00
9 ALUMINUM FLAT BAR 6061-T6511 2.00" x 2.50" X 144.0000" Part No OFFERING***** MATERIAL	1 PCS 12 FT @ 11.8333 FT	71 LBS 12 FT 142.00

17Jul12 14:22 S A L E S A C K N O W L E D G M E N T No: PEC ST-472083

Sold By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Sold To: (20115)
 DART AEROSPACE

Ship To: (1)
 DART AEROSPACE

S A L E S A C K N O W L E D G M E N T SO No PEC ST-472083
 Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

10	ALUMINUM ROUND BAR 6061-T6511	2 PCS	22 LBS
	1.00" DIA X 144.0000"		24 FT
	MATERIAL	24 FT @ 1.8333 FT	44.00
11	ALUMINUM ROUND BAR 6061-T6511	1 PCS	141 LBS
	3.50" DIA X 144.0000"		12 FT
	MATERIAL	12 FT @ 23.5000 FT	282.00
12	ALUMINUM SHEET 6061 T6	2 PCS	109 LBS
	.0810 Nom X 48.0000" X 144.0000"		
	MATERIAL	2 PCS @ 149.0000 EA	298.00
13	ALUMINUM SHEET 6061 T6	2 PCS	112 LBS
	.1250 Nom X 48.0000" X 96.0000"		
	MATERIAL	2 PCS @ 155.0000 EA	310.00
14	ALUMINUM PLATE 7075T7351	1 PCS	58 LBS
	2.50" THICK X 3.2500" X 72.0000"		
	Part No PLATE ASTM B 209 QQ-A-250/12		
	<<<----- SPECIFICATIONS ----->>>		
	Ga Tol + 0.0000 - 0.0000 Pc/Tag 1		
	WthTol + 0.0630 - 0.0000 Wt/Skd		
	LthTol + 0.0630 - 0.0000 Ty Pk		
	MATERIAL	1 PCS @ 298.0000 EA	298.00

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
 TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

** CUSTOMER PICK-UP HRS / 9:00 AM TO 4:00 PM **

*** TEL. 800-926-2600 ***

* WE STOCK STAINLESS STEEL!!!! *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
 ADDED TO EVERY ORDER.***

*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

*VISIT OUR WEBSITE: www.copperandbrass.com

Order Totals: 14 Items 2,272 LBS

Material	Processing	Freight	Other	Taxes	ORDER AMT
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Page: 2Continued

17Jul12 14:22 S A L E S A C K N O W L E D G M E N T No: PEC ST-472083

Sold By:

THYSSENKRUPP MATERIALS NA

2821 LANGSTAFF ROAD

CONCORD, ONTARIO L4K 5C6

Tel: 905 669 9444 Fax: 9057389033

Sold To: (20115)

DART AEROSPACE

Ship To: (1)

DART AEROSPACE

=====

S A L E S A C K N O W L E D G M E N T SO No PEC ST-472083

Test Certs: Chem Y Phys Y 1 Original copies with Shipment, 1 with Invoice

4,692.20

25.00

613.23

5,330.43

Taxes: ONHSTS 613.23



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

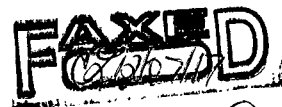
Page Number 1 of 7

Order From : VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M174B1.500X02.250	17-4 SS Bar 1.50 X2.250	7/30/12 Yes	12.00 f	Yours ppd	\$53.5933	\$643.12
		Special In	MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI				
2	M2024T3S.063 <i>cancel</i>	2024-T3 .063 sheet	7/23/12 Yes	96.00 sf	Yours ppd	\$5.9375	\$570.00
		Special Inst:	MATERIAL: 2024-T3 ALUMINUM SHEET QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209				
3	M303B1.000X1.000	303 BAR 1" X 1"	7/25/12 Yes	12.00 f	Yours ppd	\$13.7500	\$165.00

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 2 of 7

Order From : VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

Special Inst: MATERIAL: AISI 303 SS BAR AS PER
ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

4	M304B0.500X2.500	304 BAR .500 x 2.50	7/25/12	24.00	Yours ppd	\$12.9083	\$309.80
			Yes	f			

Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS
PLATE

AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

5	M304B0.625X3.000	304 BAR .625 X 3.00	7/25/12	12.00	Yours ppd	\$20.2500	\$243.00
			Yes	f			

Special Inst: AISI 304/316 SS BAR OR AISI 304/316 SS
PLATE

AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

6	M304S11GA	304/316 0.125 Sheet	7/23/12	280.00	Yours ppd	\$9.0193	\$2,525.40
			Yes	sf			

Special Inst: MATERIAL: AISI 304/316 SS SHEET
ANNEALED 2B FINISH
AS MIL-S-5059 OR AMS 5513 (304) OR
AMS 5524 (316)
OR ASTM A240 OR ASME SA240

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 3 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

7	M6061T6B0.500X01.250	6061-T6 Bar .500 x 1.25	7/23/12	24.00	Yours ppd	\$1.5750	\$37.80
			Yes	f			

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

8	M6061T6B0.500X06.000	6061-T6 Bar .500 x 6.00	7/23/12	24.00	Yours ppd	\$7.1667	\$172.00
			Yes	f			

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

9	M6061T6B0.750X01.500	6061-T6 Bar .750 X 1.50	7/23/12	24.00	Yours ppd	\$2.6667	\$64.00
			Yes	f			

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

No substitution or deviation without
consent.

Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 4 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

10	M6061T6B1.000X04.000	6061-T6 Bar 1.00 x 4.00	7/23/12	24.00	Yours ppd	\$9.4167	\$226.00
			Yes	f			

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

11	M6061T6B1.250X01.250	6061-T6 Bar 1.25 x 1.25	7/23/12	12.00	Yours ppd	\$3.6667	\$44.00
			Yes	f			

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

12	M6061T6B1.500X02.000	6061-T6 Bar 1.50 x 2.00	7/23/12	12.00	Yours ppd	\$7.0000	\$84.00
			Yes	f			

Special Inst: MATERIAL: 6061-
T6/T651/T6510/T6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17463

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 5 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

13	M6061T6B2.000X02.250	6061-T6 Bar 2.00 x 2.25	7/23/12	12.00	Yours ppd	\$11.8333	\$142.00
			Yes	f			

Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211 OR
ASTM B221

14	M6061T6R1.000	ROUND BAR 1.00"	7/23/12	24.00	Yours ppd	\$1.8333	\$44.00
			Yes	f			

Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/
4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160
OR ASTM B211 OR ASTM B221

15	M6061T6R3.500	6061 RD bar 3.50	7/23/12	12.00	Yours ppd	\$23.5000	\$282.00
			Yes	f			

Special Inst: MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8
OR AMS 4117/4128/
4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160
OR ASTM B211 OR ASTM B221

No substitution or deviation without consent.

Certificate of Conformity or Material Certification required? YES NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 6 of 7

Order From : VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Requisition Nbr	
Vendor Fax	905 738 9033	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	Net 30
		Currency	CAD
		FOB	Destination-Collect

16	M6061T6S.032	6061-T6 Sheet 0.032"	7/23/12	96.00	Yours ppd	\$1.9792	\$190.00
			Yes	sf			

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM
SHEET
AS PER QQ-A-250/11 OR AMS-QQ-A-
250/11 OR
AMS 4025 OR AMS 4027 OR ASTM B209

17	M6061T6S.080	6061-T6 .080 Sheet	7/23/12	96.00	Yours ppd	\$3.1042	\$298.00
			Yes	sf			

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM
SHEET
AS PER QQ-A-250/11 OR AMS-QQ-A-
250/11 OR
AMS 4025 OR AMS 4027 OR ASTM B209

18	M6061T6S.125	6061-T6 .125 Sheet	7/23/12	64.00	Yours ppd	\$4.8438	\$310.00
			Yes	sf			

Special Inst: MATERIAL: 6061-T6/T62 ALUMINUM
SHEET
AS PER QQ-A-250/11 OR AMS-QQ-A-
250/11 OR
AMS 4025 OR AMS 4027 OR ASTM B209

19	M7075T73B2.500X03.25	7075-T73 Bar 2.50 x 3.25	7/23/12	6.00	Yours ppd	\$49.6667	\$298.00
			Yes	f			

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required **YES** NO

Change Nbr: 1

Change Date: 7/17/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO17463**

Purchase Order Date 7/17/12

PO Print Date 7/17/12

Page Number 7 of 7

Order From :

VC-COP001

THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Contact Name

Vendor Phone

Vendor Fax

Vendor Account Nbr

905 669 9444

905 738 9033

Buyer

Requisition Nbr

Tax Resale Nbr

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

Special Inst: 7075-T73 (OR 7075-
T7351/T73510/T73511) BAR PER ASM-
QQ-A-200/11 OR AMS-QQ-A-225/9 (AMS
4124) OR AMS-QQ-A-250/12 (AMS 4078)

PO Total:

\$6,648.12

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

W CQ

Change Nbr: 1

Change Date: 7/17/12

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required - YES NO

Q U O T A T I O N

No: PEC ST-471216

Quoted By:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

Quoted To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Quoted Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Trm NET 30 DAYS/NET 30 JOURS Qtd 13Jul12 Qte Ref
Frt PREPAID Via FOB
Tel 613-632-9577 Fax 613-632-1053 Ctc CHANTAL
Slp STAN IVERS (905-532-1350)

Q U O T A T I O N

QT No: PEC ST-471216

Test Certs: Chem-Y Phys-Y 1 Original copies with Shipment, 1 with Invoice

1 STAINLESS STEEL PLATE 17-4 1.50 X 2.2500" X 144.0000" Part No 7-10 DAYS PLATE ASTM A 484 MATERIAL ENERGY & CAP SURCHG	1 PCS @ 643.1200 EA 25.0000 LOT	137 LBS 643.12 25.00
2 ALUMINUM SHEET 2024 -T3 .0640 Nom X 48.0000" X 144.0000" Part No MATERIAL DUE SEPT 15 MATERIAL SKID	2 PCS @ 285.0000 EA 25.0000 LOT	86 LBS 570.00 25.00
3 STAINLESS STEEL SQ BAR 303 STAINLESS 1.00" X 144.0000" Part No 4-6 DAYS A.R.O MATERIAL	1 PCS @ 165.0000 EA	41 LBS 165.00
4 STAINLESS STEEL PLATE 304L .50" THICK X 2.5000" X 144.0000" Part No CUT PLATE 5-7DAYS ASTM A 240 <<<----- SPECIFICATIONS ----->>> Ga Tol + 0.0000 - 0.0000 Pc/Tag 2 WthTol + 0.0630 - 0.0000 Wt/Skd LthTol + 0.0000 - 0.0000 Ty Pk MATERIAL	2 PCS @ 154.9000 EA	105 LBS 309.80
5 STAINLESS STEEL PLATE 304L .625" THICK X 3.0000" X 144.0000" Part No CUT PLATE 5-7DAYS ASTM A 240 <<<----- SPECIFICATIONS ----->>> Ga Tol + 0.0000 - 0.0000 Pc/Tag 1 WthTol + 0.0630 - 0.0000 Wt/Skd LthTol + 0.0000 - 0.0000 Ty Pk	1 PCS	77 LBS

6061T6 B 2" X 8" X 12 ft.

Q U O T A T I O N

No: PEC ST-471216

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Quoted To: (20115)
 DART AEROSPACE

Quoted Ship To: (1)
 DART AEROSPACE

===== Q U O T A T I O N =====				QT No: PEC ST-471216
MATERIAL	1 PCS @	243.0000 EA		243.00
6 STAINLESS STEEL SHEET 304-2B .1200 Nom X 48.0000" X 120.0000"	7 PCS			1403 LBS
MATERIAL	7 PCS @	360.7714 EA		2,525.40
7 ALUMINUM FLAT BAR 6061-T6511 .50" x 1.250" X 144.0000"	2 PCS			18 LBS
MATERIAL	24 FT @	1.5750 FT		24 FT 37.80
8 ALUMINUM FLAT BAR 6061-T6511 .50" X 6.00" X 144.0000"	2 PCS			86 LBS
MATERIAL	24 FT @	7.1667 FT		24 FT 172.00
9 ALUMINUM FLAT BAR 6061-T6511 .750" X 1.50" X 144.0000"	2 PCS			32 LBS
MATERIAL	24 FT @	2.6667 FT		24 FT 64.00
10 ALUMINUM FLAT BAR 6061-T6511 1.00" x 4.00" X 144.0000"	2 PCS			113 LBS
MATERIAL	24 FT @	9.4167 FT		24 FT 226.00
11 ALUMINUM SQUARE BAR 6061-T6511 1.250" X 144.0000"	1 PCS			22 LBS
MATERIAL	12 FT @	3.6667 FT		12 FT 44.00
12 ALUMINUM FLAT BAR 6061-T6511 1.50" x 2.00" X 144.0000"	1 PCS			42 LBS
MATERIAL	12 FT @	7.0000 FT		12 FT 84.00
13 ALUMINUM FLAT BAR 6061-T6511 2.00" x 2.50" X 144.0000" Part No OFFERING***** **	1 PCS			71 LBS
MATERIAL	12 FT @	11.8333 FT		12 FT 142.00
14 ALUMINUM ROUND BAR 6061-T6511 1.00" DIA X 144.0000"	2 PCS			22 LBS
MATERIAL	24 FT @	1.8333 FT		24 FT 44.00
15 ALUMINUM ROUND BAR 6061-T6511 3.50" DIA X 144.0000"	1 PCS			141 LBS
MATERIAL	12 FT @	23.5000 FT		12 FT 282.00
16 ALUMINUM SHEET 6061 T6 .0320 Nom X 48.0000" X 144.0000" Part No 4-6 DAYS A.R.O	2 PCS			43 LBS

Q U O T A T I O N

No: PEC ST-471216

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Quoted To: (20115)
 DART AEROSPACE

Quoted Ship To: (1)
 DART AEROSPACE

```
=====
                        Q U O T A T I O N                        QT No: PEC ST-471216
MATERIAL                2 PCS @                95.0000 EA                190.00
SKID                    25.0000 LOT                25.00
=====
```

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-----
17 ALUMINUM SHEET 6061 T6                2 PCS                109 LBS
   .0810 Nom X 48.0000" X 144.0000"
MATERIAL                2 PCS @                149.0000 EA                298.00
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-----
18 ALUMINUM SHEET 6061 T6                2 PCS                112 LBS
   .1250 Nom X 48.0000" X 96.0000"
MATERIAL                2 PCS @                155.0000 EA                310.00
-----
```

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-----
19 ALUMINUM PLATE 7075T7351                1 PCS                58 LBS
   2.50" THICK X 3.2500" X 72.0000"
   Part No PLATE ASTM B 209 QQ-A-250/12
   <<<----- SPECIFICATIONS ----->>>
   Ga Tol + 0.0000 - 0.0000 Pc/Tag                1
   WthTol + 0.0630 - 0.0000 Wt/Skd
   LthTol + 0.0630 - 0.0000 Ty                Pk
MATERIAL                1 PCS @                298.0000 EA                298.00
-----
```

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
 WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
 TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **

** REFERENCED ON IT **

Price in effect at time of shipment.

Price based on receipt of total order.

All weights are theoretical.

All orders are subject to credit approval.

**** TEL. 800-926-2600 ****

*** CUSTOMER PICK-UP HOURS ***

*** 9:00 AM TO 4:00 PM ***

* WE STOCK STAINLESS STEEL!!!! *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
 ADDED TO EVERY ORDER.***

*FOR OUR FULL SALES TERMS AND CONDITIONS, PLEASE

*VISIT OUR WEBSITE: www.copperandbrass.com

```
*****
                        Order Totals:                19 Items                2718 LBS
*****
Material    Processing    Freight                Other                Taxes                ORDER AMT
6,648.12                75.00                874.00                7,597.12
*****
```


Q U O T A T I O N

No: PEC ST-471216

Quoted By:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Quoted To: (20115)
 DART AEROSPACE

Quoted Ship To: (1)
 DART AEROSPACE

=====

		Q U O T A T I O N		QT No: PEC ST-471216
Taxes: ONHSTS	874.00	0.00	0.00	0.00

B I L L O F L A D I N G

No: PEC 777693

Ship From:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW
 Probill

Via VIM TRANSFER
 FOB CONCORD
 Frt PREPAID

Route 0- 0 Manifest
 Vhcle Trailer
 Slp STAN IVERS (905-532-1350)

Sold To: (20115)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7

Ship To: (1)
 DART AEROSPACE
 1270 ABERDEEN ST
 HAWKESBURY, ON K6A 1K7
 Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC-472083- 1 Your PO # 17463
 STAINLESS STEEL SQ BAR 303 STAINLESS
 1.00" X 151.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
245298	88401	12 ' 7.0000 "	1	43

2) Our Order PEC-472083- 2 Your PO # 17463
 STAINLESS STEEL SHEET 304-2B
 .1200 Nom X 48.0000" X 120.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
SF29688	88728	280.00 SFT	7	1347

3) Our Order PEC-472083- 3 Your PO # 17463
 ALUMINUM FLAT BAR 6061-T6511
 .50" x 1.250" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
Z00248009	88402	24 FT	2	17

4) Our Order PEC-472083- 4 Your PO # 17463
 ALUMINUM FLAT BAR 6061-T6511
 .50" X 6.00" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
201210006	88403	24 FT	2	84

5) Our Order PEC-472083- 5 Your PO # 17463
 ALUMINUM FLAT BAR 6061-T6511
 .750" X 1.50" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
HK079 712	88404	24 FT	2	32

Page: 1Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
 RAPPORTÉES IMMÉDIATEMENT

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMÉRO D'APPROBATION SEULEMENT.
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

B I L L O F L A D I N G

No: PEC 777693

Ship From:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

Ship Date 23Jul12 at 10:57 From PFW
 Probill
 Via VIM TRANSFER
 FOB CONCORD
 Frt PREPAID
 Route 0- 0 Manifest
 Vhcle Trailer
 Slp STAN IVERS (905-532-1350)
 Sold To: (20115)
 DART AEROSPACE

Ship To: (1)
 DART AEROSPACE

B I L L O F L A D I N G

6) Our Order PEC-472083- 6 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.00" x 4.00" X 144.0000"

Heat Number
201210303Tag No
88405Quantity
24 FTPCS
2Wt LBS
114

7) Our Order PEC-472083- 7 Your PO # 17463

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

Heat Number
Z00240017Tag No
88406Quantity
12 FTPCS
1Wt LBS
23

8) Our Order PEC-472083- 8 Your PO # 17463

ALUMINUM FLAT BAR 6061-T6511

1.50" x 2.00" X 144.0000"

Heat Number
201209117Tag No
88407Quantity
12 FTPCS
1Wt LBS
43

9) Our Order PEC-472083- 9 Your PO # 17463

Part # OFFERING***** Rel #

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

Heat Number
C7331164Tag No
88408Quantity
12 FTPCS
1Wt LBS
71

10) Our Order PEC-472083- 10 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

1.00" DIA X 144.0000"

Heat Number
Z00216020Tag No
88409Quantity
24 FTPCS
2Wt LBS
23

11) Our Order PEC-472083- 11 Your PO # 17463

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

Page: 2Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
 RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY.

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

B I L L O F L A D I N G

Ship From:
 THYSSENKRUPP MATERIALS NA
 2821 LANGSTAFF ROAD
 CONCORD, ONTARIO L4K 5C6
 Tel: 905 669 9444 Fax: 9057389033

No: PEC 777693
 Ship Date 23Jul12 at 10:57 From PFW
 Probill
 Via VIM TRANSFER
 FOB CONCORD
 Frt PREPAID
 Route 0- 0 Manifest
 Vhcle Trailer
 Slp STAN IVERS (905-532-1350)
 Sold To: (20115)
 DART AEROSPACE

Ship To: (1)
 DART AEROSPACE

B I L L O F L A D I N G

Heat Number	Tag No	Quantity	PCS	Wt LBS
21112151	88410	12 FT	1	140

12) Our Order PEC-472083- 12 Your PO # 17463
 ALUMINUM SHEET 6061 T6
 .0810 Nom X 48.0000" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
25872/01/00	88035	96.00 SFT	2	105

13) Our Order PEC-472083- 13 Your PO # 17463
 ALUMINUM SHEET 6061 T6
 .1250 Nom X 48.0000" X 96.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
30286/01/00	88036	64.00 SFT	2	109

14) Our Order PEC-472083- 14 Your PO # 17463
 Part # PLATE ASTM B 209 QQ-A-250/12 Rel #
 ALUMINUM PLATE 7075T7351
 2.50" THICK X 3.2500" X 72.0000"
 *** BACK ORDER ***

TOTAL:	Tags	PCS	LBS
	13	26	2151

Heat Number *** Chemical Analysis ***
 201209117
 201210006
 201210303
 21112151
 245298
 25872/01/00
 30286/01/00
 HK079 712
 SF29688
 Z00216020

Page: 3Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
 RAPPORTÉES IMMÉDIATEMENT.
 ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY.
 RETOUR DE MARCHANDISES AVEC NOTRE NUMÉRO D'APPROBATION SEULEMENT.
 MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

B I L L O F L A D I N G

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 9057389033

No: PEC 777693
Ship Date 23Jul12 at 10:57 From PFW
Probill
Via VIM TRANSFER
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G

Z00240017
Z00248009

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

TOTAL 1 BDL, 2 SKIDS GW. 2477 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

Page: 4 Last

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

Certificate of Mill Test Results

PO/Rel 17463

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by: BL PEC-777693-001 23Jul12 Pg 1/1

Client / Destinataire / Purchasing Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
CON-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**
 Hermetitanung produce

Oggetto Prova: - Annealed Cold Drawn
Processo di Analisi: Immediato/Preparazione

Avviso di Spedizione: D-V108000486
Editoriale Picking Int'l.

Order nr: 705001820 STOCK
 Beal: Your order: Commande

Tipo di Elaborazione: E+AOD

**CERTIFICATO DI COLLAUDO
ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
EN 10204 (2005) . 3.1**

Certificato nr: MEST576706/2008/
Prüfung Test Final

Conferma ordine nr. E107004722
WorkOut Order/Effici.

Marchio di Fabbrica
Zeichen des Herstellers
Trade mark
Selo de fabrica producer

Punzone del Colaudatore:
Semplicità, Workcoach e condizioni
lavorative e clima. Pratiche di lavoro.

Specifics:
Anforderungen / Requirements / Exigences

VSI 0 303 A,CF
ASME SA320 2004 B8F 0
ASTM A370 2007A .
QQ-S-764 B/2 303 A
(0) SEC.II P.T.A 2004 EDITION ADD.2008
(1) Chemical analysis only.

AMS 5640 U S30300 A
ASTM A314 97 S30300
ASTM A582 2005 S30300 A

AMS 5640 U TYPE 1 A
ASTM A320 2007A B8F (1)
MIL-S-852 B/1 303

OCChemical analysis only.

Qualità: T-303
Vestibilità: Coda/Numero

Marca: VPAU188Z VALPLUS
Nizkorbotolohrvn761rC8tuanu

Punznummer: T-303
Kennzeichnung: Mordung/Mordung

Pos. nr. Pos. nr. N.º di pezzi	Objetto Descrizione Prodotto, descrizione Dizionario, di prodotti	Dimensioni - in Abbreviazioni Altre Unità	Tolleranza Tolleranza Tolleranza	Lunghezza - R Lunghe Lunghe Lunghe	Colore Colori Colori	Pezzi Strumenti Pezzi	Peso - LB Grossi Pesi	Lotto nr. Lotto Lotto
0060	Square	1,000 x 1,000	484-06B	13 / 13	245296		1.790	706701180

Sono state soddisfatte tutte le condizioni richieste.
Die gesellen Anforderungen sind 2 Anlagen erfüllt.
The material has been furnished in accordance with the requirements.
Les exigences ont été toutes confirmées aux prescriptions.

Controllo antimescolanza: OK
Verwechselungsprüfung: spezifiziert, durchgeführt
Anspruchsbefreiung durchgeführt: OK
Controllo collaudabilità: OK

Controllo visivo e dimensionale: soddisfa le esigenze:
 Bestimmung und Aufzeichnung ohne Beanspruchung
 Visual inspection and dimensional check easily
 Contrôle visuel et dimensionnel satisfaisant

[illegible]

Grain size for ASTM E112

6

[illegible]

Analisi chimica

Chemical Engineering Department, Chemical Engineering, University of...

Colada / Plat Schmelze / Coulee	min - max 0,150	1,00	1,50 2,00	7,00 15,00	0,00	1,00	8,00 10,00	-	-	0,100	0,25 0,35	0,40	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %					
245298	0,053	0,47	1,79	17,24	0,38	0,71	8,13	0,10	0,029	0,28	0,01					

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 1 hr/water.

Micro and macro etch test: OK

Material is DEARS Compliant

Molded and manufactured in Italy

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1, s. 4.3 by TÜV and LLOYD'S

Venezia, 14/01/08

(Med. Mod. 1981)

il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'agent d'usine

M. Rizzotti, A. ...

Pagina - 1 di 1

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
50" x 1.250" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-003

23Jul12

Signed by: _____ Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-236648-4		CUSTOMER PART NUMBER: ALREC00139		PRODUCT DESCRIPTION: 0.500 X 1.250 SQ COR RECT BAR	
KAISER ORDER NUMBER: 612835	LINE ITEM: 004	SHIP DATE: 02/03/2012	KAISER LOT NUMBER: Z00248009	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 494.000 LB	QUANTITY: 56.000 PCS	B/L NUMBER: 602545	DIAM/DAF/THKNS: 0.500	WIDTH: 1.250	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00248009	0C01	1	45.9	43.1	15.5	RE 91	N/A	N/A
Z00248009	0C01	2	47.0	44.1	16.2	RE 92	N/A	N/A
Z00248009	0C01	3	46.5	43.6	17.1	RE 94	N/A	N/A
Z00248009	0C01	4	47.1	44.5	17.1	RE 91	N/A	N/A
Z00248009	0C01	5	46.5	43.8	16.5	RE 88	N/A	N/A
Z00248009	0C01	6	46.0	43.0	17.9	RE 94	N/A	N/A
Z00248009	0C01	7	45.6	42.3	15.9	RE 93	N/A	N/A
Z00248009	0C01	8	46.2	43.3	16.1	RE 91	N/A	N/A
Z00248009	0C01	9	46.5	43.7	17.9	RE 93	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101C84	.73	.37	.29	.08	.94	.10	.08	.03	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-08-STENCILED ASME-SB221 1993 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Plant Serial: 00028007

Kaiser Order Number: 612835

Line Item: 004

THYSSENKRUPP MATERIALS NA**DART AEROSPACE**

ALUMINUM FLAT BAR 6061-T6511

.50" x 1.250" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PRC-777693-003

23Jul12

Signed by: _____

Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

*Best in Class***CERTIFIED TEST REPORT**<http://Online.KaiserAluminum.com>**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

Alex Yeh

Plant Serial: 00028007

Kaiser Order Number: 512835

Line Item: 004

Page 2 of 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

1.00" x 4.00" X 144.0000"

PART NO.

PO/Ref 17463

 We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PBC-777693-006

23Jul12

Pg 1/1


SERVICE CENTER METALS

5850 Quality Way

Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152409	3

BILL TO	MANIFEST NUMBER	DIE NUMBER	DATE OF SHIPMENT	CERTIFICATION
ThyssenKrupp Materials NA	162248	RB0128	6/19/2012	ASTM-B221-12 StencilContinuous
SHIP TO	CUSTOMER PO	ALLOY / TEMPER	SALESPERSON	SPECIFICATION
ThyssenKrupp Materials NA PEC	PEC-239753	6061-T6511	David Schroeder	AMS-QQA-200/8-07
Quantity Certified	CUSTOMER PART NUMBER	DESCRIPTION		
1,482 lbs 26 pcs	RB0128	SCRB 1.000x4.000		

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCA

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
1	201210303	06/12/12	50.2	46.9	14.9

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
0512135	6061	0.73	0.38	0.31	0.09	0.84	0.09	0.07	0.02	97.47	0.05	0.15	United States of America

Print Date: 6/19/2012

Calvin J. Higgins, Director of Quality & Technical Services

Rev 5/23/11 - JMS

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

1.50" x 2.00" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PEC-777693-008

23Jul12

Pg 1/1



SERVICE CENTER-METALS

5850 Quality Way

Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
152110	12

BILL TO

ThyssenKrupp Materials NA

SHIP TO

ThyssenKrupp Materials NA PEC

Quantity Certified 1,369 lbs 32 pcs

MANIFEST NUMBER

161536

CUSTOMER PO

PEC-239616

CUSTOMER PART NUMBER

RB0138

DIE NUMBER

RB0138

ALLOY / TEMPER

6061-T6511

DESCRIPTION

SCRB 1.500x2.000

DATE OF SHIPMENT

6/8/2012

SALESPERSON

David Schroeder

CERTIFICATION

ASTM-B221-12 StencilContinuous

SPECIFICATION

AMS-QQA-200/8-07

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. SCM extrusions are manufactured in the USA.

Items produced and certified as 6061-T6511 also meet the requirements of 6061-T6

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
91	201209117	05/25/12	51.5	49.2	14.9
92	201209117	05/25/12	49.9	46.8	15.1
93	201209117	05/25/12	49.2	46.4	15.6
94	201209117	05/25/12	49.1	46.0	16.8
95	201209117	05/25/12	49.3	46.7	15.2
96	201209117	05/25/12	49.3	45.9	15.3

Chemical Composition for Aluminum Alloy 6061

Cast Number	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Others Each	Total	Melt Source:
031424	6061	0.77	0.38	0.35	0.11	0.91	0.09	0.06	0.02	97.31	0.05	0.15	United States of America
032224	6061	0.72	0.38	0.30	0.09	0.86	0.09	0.06	0.02	97.48	0.05	0.15	
032725	6061	0.74	0.36	0.32	0.10	0.84	0.09	0.08	0.02	97.45	0.05	0.15	

Calvin J. Williams

Print Date: 6/8/2012

Calvin J. Williams, Director of Quality & Technical Services

Rev. 8/23/11 - UMS

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6S11
1.00" DIA X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-010

23Jul12

Signed by: _____

Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-239097-5		CUSTOMER PART NUMBER: 015246-2		PRODUCT DESCRIPTION: KAISERSELECT PRECISION ROD 1.000+/-0.004	
KAISER ORDER NUMBER: 620138	LINE ITEM: 005	SHIP DATE: 05/11/2012	KAISER LOT NUMBER: Z00216020	ALLOY: 6061	TEMPER: T6511B
WEIGHT SHIPPED: 2922.000 LB	QUANTITY: 264.000 PCS	BIL NUMBER: 603400	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z0021602C	0C01	1	51.2	49.0	16.9	RE 94	N/A	N/A
Z0021602C	0C01	2	50.9	48.6	16.3	RE 93	N/A	N/A
Z0021602C	0C01	3	50.7	48.6	16.9	RE 93	N/A	N/A
Z0021602C	0C01	4	50.1	47.4	15.8	RE 93	N/A	N/A
Z0021602C	0C01	5	51.1	48.9	16.6	RE 94	N/A	N/A
Z0021602C	0C01	6	51.6	49.3	16.4	RE 94	N/A	N/A
Z0021602C	0C01	7	51.2	48.9	17.3	RE 95	N/A	N/A
Z0021602C	0C02	1	49.7	47.2	17.4	RE 94	N/A	N/A
Z0021602C	0C02	2	49.6	47.0	16.6	RE 95	N/A	N/A
Z0021602C	0C02	3	50.1	47.9	15.7	RE 94	N/A	N/A
Z0021602C	0C02	4	50.3	47.9	16.9	RE 94	N/A	N/A
Z0021602C	0C02	5	49.5	47.9	16.9	RE 93	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.03	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.30	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101538	.72	.32	.28	.39	.95	.09	.05	.03	.00	.00	.00	.01	.03

Applicable Requirements:

PER ASTM-B221-08, STENCILED ASME-SB221 1998 SECT II PER AMS-QQ-A-200/8 UNS# A96061
MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM MECHANICAL
PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

Page 1 of 2

THYSSENKRUPP MATERIALS NA**DART AEROSPACE**ALUMINUM ROUND BAR 6061-T6511
1.00" DIA X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.**Certificate of Mill Test Results**

BL.PHC-777693-010

23Jul12

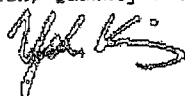
Signed by: _____

Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTSKAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048**CERTIFIED TEST REPORT**<http://Online.KaiserAluminum.com>**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager



Plant Serial: 00043535

Kaiser Order Number: 620138

Line Item: 005

Page 2 of 2

THYSSENKRUPP MATERIALS NA

Certificate of Mill Test Results

DART AEROSPACE

ALUMINUM SHEET 6061 T6
.1250 Nom X 48.0000" X 96.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

BL PEC-777693-013

23Jul12

Signed by: Pg 1/2

Abnahmeprüfzeugnis 3.1 (EN 10204)
Inspection certificate - mill certificate

Nr.: 85283529 06 / 9

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 04 11

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, EN/AS 9100, ISO 14001, AADCAP

Auftraggeber / customer: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	Bestell Nr. / order no.: PEC-237401 Datum / date: 2012 03 05
Warenempfänger / consignee: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 5C6 CONCORD, ON	Auftragsbest. Nr. / order confirm. no.: 638423 Datum / date: 2012 03 06
Endkunde, Bestell-Nr. / Your cust., ord. no.:	Lieferschein Nr. / delivery note: 85283529 Datum / date: 2012 04 30
	Akkreditiv Nr. / letter of credit no.:

Produkt/product	Bedingungen/terms
Form / form: Sheet Werkstoff / material: 6061 Zustand / temper: T6 Dim. / dim: [inch]: 0,125x48,00x96,00 Kundenartikel-Nr / customer article no.:	Techn. Lieferbedingungen / techn. spec.: AMS-QQ-A-250/11, 08.1997 ASTM B 209 - 07 Material meets also the mech. properties of AMS 4027N, 07.2008, but not marked ANSI H35.2-2009 ASME SB 209, 2007
	Sondervorschrift / special terms:

AB-Pos. ord.-item.	BNr/Los/Teil/Los Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo packno.	Gewicht netto weight net	Stk. pcs.
04	30286/01/00	01/0049556/2	6061.1	6384230007	4003,527 lbs	73
04	30286/01/00	01/0049556/2	6061.1	6384230008	4001,323 lbs	73

Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)											
Guss Nr. / cast no.	AWAG designation										
01/0049556/2	6061.1	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	
	actual	0,08	0,43	0,26	0,12	0,93	0,18	0,01	0,05	0,05	

Zugversuch / Tensile test									
BNr/Los Lot/No.	Zustand temper	Richtung direction			Rm [ksi]	Rp0.2 [ksi]	A2" [%]		
30286/01	T6	LT			47,4	41,0	15		
30286/01	T6	LT			47,1	40,6	14		
30286/01	T6	LT			47,1	40,6	14		
30286/01	T6	LT			47,1	40,8	14		
30286/01	T6	LT			47,0	40,3	16		
30286/01	T6	LT			47,0	40,3	15		
30286/01	T6	LT			47,1	40,5	15		
30286/01	T6	LT			47,4	40,6	15		
30286/01	T6	LT			47,9	41,0	15		

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich - www.amag.at
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria - www.amag.at

THYSSENKRUPP MATERIALS NA**DART AEROSPACE**ALUMINUM SHEET 6061 T6
.1250 Nom X 48.0000" X 96.0000"
PART NO.**PO/Rel 17463**We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.**Certificate of Mill Test Results**

BL PEC-777693-013

23Jul12

Signed by: _____ Pg 2/2

**Abnahmeprüfzeugnis 3.1 (EN 10204)**
Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 13549, EN/AS 9100 ISO 14001, NADCAP

Nr.: 85283529 06 / 9**Rev. 0**

Seite / page: 2 von / of 2

Datum / date: 2012 04 11

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.
We hereby certify that the material described above has been tested and complies with the terms of the order
contract.

Werkssachverständiger / factory specialist	E-Mail / e-mail
Josef Klampfer	j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – www.amag.at
AMAG rolling GmbH, P.O. Box 32, A-5282 Ranshofen, Austria – www.amag.at

14/24

2012-Jul-21 03:18 PM ThyssenKrupp Materials NA Conc 9056691787

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL SHEET 304-2B
.1200 Nom X 48.0000" X 120.0000"
PART NO.

PO/Ref 17463
We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-002
23Jul12
Pg 1/1

Signed by: _____

产品质量证明书 MILL TEST CERTIFICATE

江苏大明金属制品有限公司
JIANGSU DAMING METAL PRODUCTS CO., LTD
DAMING METAL PRODUCTS CO., LTD
1811 XINSHIJI 5201511
ADDRESS: NO. 1811, TONGJIANG ROAD, WUXI 31200
JIAHONG PROVINCE, CHINA
TEL: 0510-858557

订单号: 02498
Model No.
客户名称: GLOBAL STAINLESS STEEL INC.
Order
使用厂家: CONECONEE

品名: COLD ROLLED STAINLESS
Commodity: STEEL SHEET, BLIT EDGE

编号: M120302001
Invoice No.
发行日期: 2012-4-15
Date

序号 No.	Product No.	炉号 Type	表面加工 Surface Finish	产品尺寸 Product Size			重量 Weight KG	标准 Specification	力学性能 Tensile Test			硬度 Hardness HV0.05	钢号/STEEL NO.	炉号 HEAT NO.	化学成分 Chemical Composition (%)									
				厚度 Thickness MM	宽度 Width MM	长度 Length MM			屈服强度 Rm0.2 Mpa	抗拉强度 Rm Mpa	延伸率 % A				C	Si	Mn	P	S	Ni	Cr	N		
1	P001093060	304	2B	0.5	1219	2438	910.84	ASTM A240	275	731	65	167	QWA0130C	SF26011	0.0510	0.5000	1.0620	0.0321	0.0057	0.02	10.26	1		
2	P001093081	304	2B	0.5	1219	3048	908.08	ASTM A240	278	731	65	167	QWA0130C	SF28811	0.0510	0.5000	1.0620	0.0321	0.0067	0.02	10.26	1		
3	P001715073	304	2B	0.5	1219	3048	959.60	ASTM A240	270	731	60	167	QWA0130C	SF21008	0.0453	0.5120	1.0510	0.0326	0.0064	0.02	10.32	1		
4	P001093219	304	2B	1.6	1219	2438	1818.74	ASTM A240	273	692	62	168	QWB020700	SF30003	0.0378	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		
5	P001093220	304	2B	1.6	1219	3048	1831.45	ASTM A240	273	692	62	168	QWB020700	SF30003	0.0373	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		
6	P001093221	304	2B	1.6	1219	3048	1831.74	ASTM A240	273	692	62	168	QWB020700	SF30003	0.0373	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		
7	P001720563	304	2B	2.0	1219	3048	936.68	ASTM A240	263	705	58	173	QWA0130C	SF21045	0.0428	0.1720	1.0300	0.0100	0.0051	0.06	10.17	1		
8	P001094293	304	2B	3.0	1219	2438	1409.00	ASTM A240	281	643	61	175	QWB0403A	SF28008	0.0501	0.4610	1.1420	0.0348	0.0034	0.05	10.44	1		
9	P001094295	304	2B	3.0	1219	3048	1407.84	ASTM A240	281	643	61	175	QWB0403A	SF28008	0.0504	0.4610	1.1420	0.0348	0.0034	0.05	10.44	1		
10	P001700018	304	2B	2.0	1219	2438	1403.30	ASTM A240	287	714	55	174	QJC0022A	SF30003	0.0378	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		
11	P001705121	304	2B	2.5	1219	3048	1303.04	ASTM A240	287	714	55	174	QJC0022A	SF30003	0.0378	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		
12	P001093702	304	NO 4+	1.5	1219	2438	1005.45	ASTM A240	287	664	59	164	QWC0101B	SF30027	0.0478	0.5270	1.0650	0.0305	0.0049	0.04	10.22	1		
13	P001093709	304	NO 4+	1.5	1219	3048	1076.55	ASTM A240	287	664	59	164	QWC0101B	SF30027	0.0478	0.5270	1.0650	0.0305	0.0049	0.04	10.22	1		
14	P001093725	304	NO 4+	2.0	1219	2438	1003.80	ASTM A240	315	647	63	83	KA11234070A10	C310855	0.0303	0.4500	1.0800	0.0300	0.0010	6.1	10.21	0.046		
15	P001705035	304	NO 4+	2.5	1219	2438	1070.30	ASTM A240	287	714	55	174	QJC0022A	SF30003	0.0378	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		
16	P001705037	304	NO 4+	2.5	1219	2438	1170.30	ASTM A240	287	714	55	174	QJC0022A	SF30003	0.0378	0.4400	1.0270	0.0185	0.0022	0.05	10.17	1		

注: 1. 尺寸和重量: 公差
2. 表面: 2B

我们特此证明, 该产品符合订单和标准的制造要求。
JIANGSU DAMING METAL PRODUCTS CO., LTD
TECHNICAL DEPT.

Pg 1/1

Calvin J. Wiggins, Director of Quality & Technical Services

Rev. 02/23/11 - LMS

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061 T6511
1.250" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC 777693-007

23Jul12

Signed by: _____ Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-240344-2		CUSTOMER PART NUMBER: ALSQ00100		PRODUCT DESCRIPTION: 1.250 SC SQ BAR	
KAISER ORDER NUMBER: 623482	LINE ITEM: 002	SHIP DATE: 07/06/2012	KAISER LOT NUMBER: Z00240017	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1058.000 LB	QUANTITY: 48.000 PCS	B/L NUMBER: 603828	DIAM/DAF/THKNS: 1.250	WIDTH: 1.250	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00240017	0001	1	52.8	50.5	16.6	RE 93	N/A	N/A
Z00240017	0001	2	51.6	49.0	17.9	RE 93	N/A	N/A
Z00240017	0001	3	51.9	49.4	17.5	RE 94	N/A	N/A
Z00240017	0001	4	52.9	50.7	16.2	RE 93	N/A	N/A
Z00240017	0001	5	52.5	50.1	17.9	RE 94	N/A	N/A
Z00240017	0001	6	51.4	49.0	17.7	RE 94	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
101758	.67	.26	.24	.09	.92	.09	.02	.03	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-12 STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 (2007) UNS#A96061
(T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

Plant Serial: C0050003

Kaiser Order Number: 623482

Line Item: 002

Page 1 of 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SQUARE BAR 6061-T6511

1.250" X 144.0000"

PART NO.

PO/Ref 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PBC-777693-007

23Jul12

Signed by: _____ Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Calvin Latting, Quality & Technology Manager

Calvin Latting

Plant Serial: 00050003
Kaiser Order Number: 623482
Line Item: 002

Page 2 of 2

18/24

2012-Jul-21 03:20 PM ThyssenKrupp Materials NA Conc 9056691787

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511
3.50" DIA X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-011

23Jul12
Pg 1/2

Signed by: _____



Sapa Industrial Extrusions
53 POTTSVILLE STREET
CRESSONA, PA
17929-0187

Sapa Extrusions Inc., a Subsidiary of Sapa AB

Invoice To Customer

THYSSENKRUPP MATERIALS NA INC
2821 LANGSTAFF ROAD
ATTN: ACCOUNT PAYABLE
CONCORD, ON - L4K-5C6

Ship To Customer

THYSSENKRUPP MATERIALS NA INC
2821 LANGSTAFF ROAD
CONCORD, ON - L4K5C6

Certified Inspection Report

Sales Order Number	Line No.	Customer P/O	Cert Number	Page
1100483665	1	PEC-240110-001	SAPA591092	1 of 2
			Cert Creation Date	Cert Print Date
			25-JUN-12	25-JUN-12

Quantity Shipped	Date Shipped	Item Description	Specification
1900 LB	25-JUN-12	ACC-U-LINE Extruded ACC-U-ROD 3.500 DIA +/- .012	ASTM B221 REV 12 AMS-CQ-A-20X/8 REV ASM E821 REV 09
B/L	Item No.	SECT 500328 144.000 IN LN FIN M-MILL	UNSWA95061 REV SABJ454 RGV
339465	CI03305626	W/F 11.314 F 1 CS 3.5 6061/T6511H	Meets 6061-T6511H, 6061-T6511 REV
Delivery Id	Item No. Rev	Marking CONTINUOUS:	
4330967			
Customer Part No.			
3.5ER+			

Applicable Specifications, Revisions and Exceptions
COMPOSITION NOTE: The values for 'Others Each' and 'Others Total' have met the limits as shown on
this certified inspection report. Remainder is Aluminum.

Legal Statement

We hereby certify that, unless otherwise indicated, the material covered by this report has been manufactured, inspected, and tested in accordance with, and has been found to meet, the applicable requirements described herein, including any specifications forming a part of the description and that samples representative of the material met the composition and had the mechanical properties shown on the face of this certification. Also, note that mercury is not a normal contaminant in aluminum alloys and neither it nor any of its compounds are used in the manufacture of our product. This certification is not to be reproduced in partial form without prior written approval of our Quality Assurance Dept.

Signature And Title

William T. Martin, III

William Martin III
Tech/Quality Manager

25-JUN-12

Quantities per Lot / Packages

Packaging Number	Lot Number	Quantity	UOM	Weight
G12-PKG1711554	21112151	7	PCS	956 950
G12-PKG1711554	21112151	--	--	--
G12-PKG1711554	21112151	--	--	--
G12-PKG1711558	21112151	7	PCS	956 950

Composition Limits

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM ROUND BAR 6061-T6511

3.50" DIA X 144.0000"

PART NO.

PO/Rel 17463

 We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by:

Certificate of Mill Test Results

BL PEC-777693-011

23Jul12

Pg 2/2

sapa

 Sapa Industrial Extrusions
53 POTTSVILLE STREET

 CRESSONA, PA
17929-0187

Certified Inspection Report

Sales Order Number

1100483665

Line No.

1

Customer P/O

PEC-240110-001

Cert Number

SAPAS91092

Page

Page 2 of 2

Cert Creation Date

25-JUN-12

Cert Print Date

25-JUN-12

Alloy	Si		Pb		Cu		Mn		Mg		Cr		Zn	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
6061	0.40	0.80	---	0.70	0.15	0.40	---	0.15	0.80	1.20	0.04	0.35	---	0.25
Alloy	Ti		Hf		Pu		Others Each		Others Total					
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max				
6061	---	0.15	---	0.05	---	0.05	---	0.05	---	0.15				

Composition Results

Heat / Cast	Si	Pb	Cu	Mn	Mg	Cr	Zn	Al	Fe	Others	Others Total
1028239	0.69	0.30	0.31	0.10	0.87	0.13	0.04	0.02	---	---	---

Mechanical Property - Test Limits

Test Type				UTS - L		YVS - L		EL 4D-Long			
DOM				RSI		RSI		PCT			
Test Parameters				Lot Number		# of Tests		MIN Value		MAX Value	
T6511H				21112151		2		51.4		53.3	
								48.3		50.3	
								12.5		15.0	

Cert Notes

Products manufactured with a T6511 temper also meet T6 temper requirements.

Yield strength has been determined by the 0.2% offset method.

All Mill Finish Alloys produced at Sapa Extrusions comply with 0.4% Maximum Lead per RoHS, with the exception of 6262 alloy.

In accordance with EN 10204 Inspection Certificate Type 3.1

Melted in the USA or Other Qualified Countries as Defined by DFARS 225.872.1

Made in USA

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.750" X 1.50" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: Pg 1/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: PEC-239300-1		CUSTOMER PART NUMBER: ALREC00806		PRODUCT DESCRIPTION: .750 X 1.500 SC RECT BAR	
KAISER ORDER NUMBER: 621011	LINE ITEM: 001	SHIP DATE: 05/25/2012	KAISER LOT NUMBER: HK079 712	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 508.000 LB	QUANTITY: 32.000 PCS	B/L NUMBER: 603528	DIAM/DA/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP MATERIALS NA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
HK079 712	0001	0001	48.0	41.6	19.4	RE 97	N/A	N/A
HK079 712	0001	0002	48.1	38.1	20.5	RE 97	N/A	N/A
HK079 712	0001	0003	48.0	41.6	20.8	RE 97	N/A	N/A
HK079 712	0001	0004	46.7	39.3	20.3	RE 97	N/A	N/A
HK079 712	0001	0005	47.4	43.3	18.0	RE 97	N/A	N/A
HK079 712	0001	0006	47.8	40.0	18.0	RE 97	N/A	N/A
HK079 712	0001	0007	48.0	42.5	18.6	RE 97	N/A	N/A
HK079 712	0001	0008	48.0	41.9	18.3	RE 97	N/A	N/A
HK079 712	0001	0009	46.9	41.3	19.4	RE 97	N/A	N/A
HK079 712	0001	0010	47.9	40.1	19.8	RE 97	N/A	N/A
HK079 712	0001	0011	46.9	38.6	15.9	RE 97	N/A	N/A
HK079 712	0001	0012	48.1	44.4	19.7	RE 96	N/A	N/A
HK079 712	0001	0013	48.0	42.2	21.7	RE 96	N/A	N/A
HK079 712	0001	0014	47.0	42.1	18.7	RE 96	N/A	N/A
HK079 712	0001	0015	47.5	39.4	17.6	RE 96	N/A	N/A
HK079 712	0001	0016	48.4	40.4	15.1	RE 96	N/A	N/A
HK079 712	0001	0017	48.0	41.9	19.5	RE 95	N/A	N/A
HK079 712	0001	0018	48.1	43.1	17.6	RE 95	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
A32603	.68	.32	.24	.05	.98	.11	.06	.01	.00	.00	.00	.00	.01
A32602	.69	.32	.23	.05	.95	.10	.04	.02	.00	.00	.00	.00	.00
A32601	.70	.30	.24	.06	.97	.11	.05	.02	.00	.00	.00	.00	.00

Applicable Requirements:

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

.750" X 1.50" X 144.0000"

PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-005

23Jul12

Signed by: Pg 2/2

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

ASTM-B221-08-STENCILED ASME-SB221 1998 SECT II AMS-QQ-A-200/8 UNS#96061 (T6511 also
conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA (COMMERCE, CA) MELTED IN USA

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been
inspected and tested and found in conformance with applicable specifications forming a part of the
description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on
Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

Plant Serial: 00045426

Kaiser Order Number: 621011

Line Item: 001

Page 2 of 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511

2.00" x 2.50" X 144.0000"

PART NO. OFFERING*****

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: _____

Certificate of Mill Test Results

BL PBC-777693-009

23Jul12

Pg 1/1



MILL TEST REPORT

TEL: (416)745-4444 FAX: (416)745-0925 1-800-668-7210
411 CHRISLEA ROAD, WOODBRIDGE, ONTARIO, CANADA L4L 8N4
<http://www.extrudex.com>

BILL TO

THYSSENKRUPP MATERIALS, NA

SHIP TO

THYSSENKRUPP MATERIALS, NA

SO DESCRIPTION

2"x2.5" FB

Cert Code:

1

0.02

CUSTOMER PG

PEC-239512

CUSTOMER PART NUMBER

DIE NUMBER

S

23922

ALLOY

6061

TEMPER

T6511

PART DESCRIPTION

DATE OF SHIPMENT

7/16/2012

SALESMAN

FORBES DODWELL

EXTRUDEX ORDER NO.

146935 - 4

MANIFEST NO.

270266

MADE IN CANADA

CERTIFICATION

MILL TEST ASTM B221

Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness	Conductivity
A.11	6061	Jul/13/12	45.2	42.4	13.30	89.3, 89.0, 89.8	

Chemical Composition

Cast Number	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
A.11 C7331164 6061	0.61	0.18	0.19	0.01	0.88	0.06	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

David Natale
Quality Control Manager

1 - CUSTOMER COPY

MILL TEST REPORT

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6
.0810 Nom X 48.0000" X 144.0000"
PART NO.

PO/Rel 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-777693-012

23Jul12

Signed by: _____

Pg 1/2



Abnahmeprüfzeugnis 3.1 (EN 10204) Inspection certificate – mill certificate

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 1 von / of 2

Datum / date: 2012 02 15

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9103, ISO 14001, NADCAP

Auftraggeber / customer: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 506 CONCORD, ON	Bestell Nr. / order no.:	PEC-236262
	Datum / date:	2012 01 19
Wareneimpläger / consignee: ThyssenKrupp Materials NA 2821 Langstaff Rd CDN-L4K 506 CONCORD, ON	Auftragsbest. Nr. / order confirm. no.:	636296
	Datum / date:	2012 01 20
Endkunde, Bestell-Nr. / Your cust., ord. no.:	Lieferschein Nr. / delivery note:	85289222
	Datum / date:	2012 02 29
	Akkreditiv Nr. / letter of credit no.:	

Produkt/product	Bedingungen/terms:
Form / form: Sheet	Techn. Lieferbedingungen / techn. spec.:
Werkstoff / material: 6061	AMS-QQ-A-250/11, 08.1997
Zustand / temper: T6	ASTM B 209 - 07
Dim. / dim: (inch): 0,080x48,00x144,00	Material meets also the mech. properties of AMS 4027N.
Kundenartikel-Nr / customer article no.:	07.2008, but not marked
	ANSI H35.2-2009
	ASME SB 209, 2007
	Sondervorschrift / special terms:

AB-Pos. ord./item.	BNr/Los/Tell/Los Lot/No./Part	Guss Nr. cast no.	Werkstoff material	Kollo: packno.	Gewicht netto weight net	Stk. pcs.
02	25872/01/00	01/0047294/1	6061.1	6362960002	4029,982 lbs	77

Chemische Zusammensetzung / chemical composition: [%] Gewichtsanteile / weight proportion (OES)

Guss Nr. / cast no.	AMAG designation	Si	Fe	Cu	Mn	Pb	Cr	Ni	Zn	Ti
01/0047294/1	6061.1									
	actual	0,65	0,48	0,23	0,11	0,01	0,18	0,01	0,04	0,06

Zugversuch / Tensile test

BNr/Los Lot/No.	Zustand temper	Richtung direction	Rm [ksi]	Rp0.2 [ksi]	A2" [%]
25872/01	T6	LT	47,0	39,2	16
25872/01	T6	LT	47,1	39,2	15
25872/01	T6	LT	47,3	39,3	15
25872/01	T6	LT	47,0	39,2	16
25872/01	T6	LT	46,8	39,0	16
25872/01	T6	LT	46,7	38,9	15
25872/01	T6	LT	46,7	38,9	15
25872/01	T6	LT	46,8	39,0	16
25872/01	T6	LT	46,6	38,7	15

AMAG rolling GmbH, Postfach 32, A-5282 Ranshofen, Österreich – www.amag.at
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THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM SHEET 6061 T6

.0810 Nom X 48.0000" X 144.0000"

PART NO.

PO/Ref 17463

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PBC-777693-012

23Jul12

Signed by: _____ Pg 2/2



Abnahmeprüfzeugnis 3.1 (EN 10204)
Inspection certificate – mill certificate

Zertifiziert nach / certified to ISO 9001, ISO/TS 16949, ENAS 9100, ISO 14001, NADCAP

Nr.: 85289222 02 / 7

Rev. 0

Seite / page: 2 von / of 2

Datum / date: 2012 02 15

Es wird bestätigt, dass die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellung entspricht.
We hereby certify that the material described above has been tested and complies with the terms of the order
contract.

Werkssachverständiger /
factory specialist

Josef Klampfer

E-Mail / e-mail

j.klampfer@amag.at

Herstellerland: Österreich / goods origin: The goods are of Austrian origin.
Maschinell erstellt - Gültig ohne Unterschrift / Automated - valid without being signed.

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